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# CURRENT MINNESOTA LABOR MARKET CONDITIONS

July, 1983 Supplement to The Review of Labor and Economic Conditions

Prepared by the Research and Statistical Services Office, MN Dept. of Economic Security, 390 N. Robert St., St. Paul MN 55101, in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics, and Employment and Training Admin.

## Nation

Most indicators of economic activity for August and the third quarter suggested that the recovery is slowing down. However, most economists believe that the recovery is still proceeding at a satisfactory pace and that the economy will continue to grow at a steady but modest rate through 1984.

Labor market conditions, for the most part, continued to improve in August though not as rapidly as in earlier months. Although a significant increase in the number of job-seekers caused the unemployment rate to remain at 9.5 percent in August, total employment rose by 278,000 and nonfarm payroll employment, without the effects of the strikes, would have risen by about 300,000. Persons on strike are not counted as employed in the establishment survey. Relatively large gains were recorded in construction and services, but it appears that the employment growth in manufacturing would have slowed considerably even without any strike activity.

Other developments in August also gave evidence of a deceleration in economic growth. Industrial production had its smallest increase since February and retail sales declined in both July and August. Although housing starts rose substantially in August, housing permits fell and housing economists predicted that the level of starts would be edging down in the coming months. Moreover, the very early estimate of real gross national product indicated that real growth in the third quarter would be about 7.0 percent, still a healthy gain but slower than the revised 9.7 percent growth in the second quarter.

## State

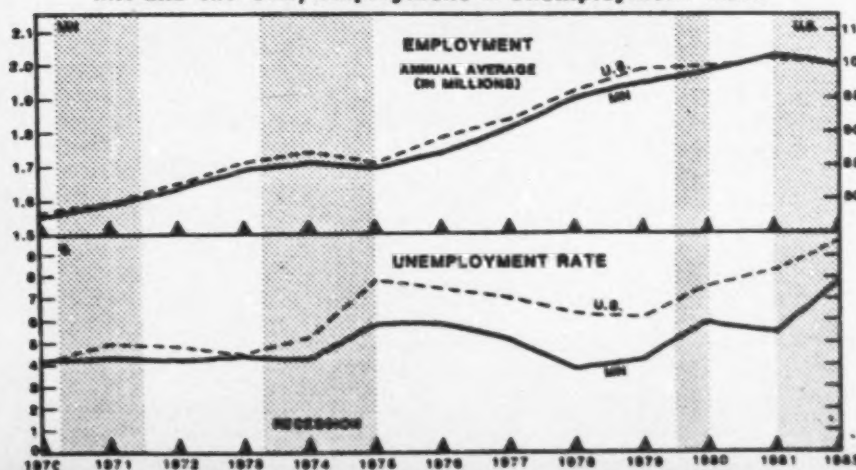
Even though unemployment did not decline significantly and the nonfarm employment picture was clouded by labor disputes, the Minnesota economy appeared to gain some strength in August, after being somewhat flat during most of 1983. Total employment showed a relatively strong rise in August and, without the strike activity, seasonally adjusted nonfarm payroll employment would probably have risen substantially in August.

The 0.3 of a percentage point drop in the State's seasonally unadjusted unemployment rate in August was fractionally less than the average July to August decline and although the rate was 0.7 of a point below that of August 1982, it was considerably higher than the August rates of previous years. On the other hand, the July to August rise of 0.9 percent in total employment contrasted with the average July to August decline of 0.7 percent. Moreover, the over-the-year gain of 1.7 percent in total employment in August was the first increase from the year before since January 1982.

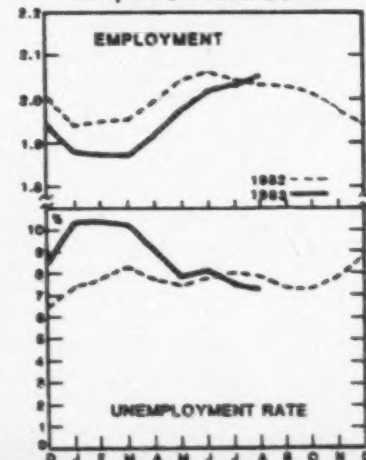
Largely as a result of labor disputes, seasonally adjusted nonfarm payroll employment fell by 900 in August, after an increase of 6,300 in July. Persons on strike are not counted as employed in the establishment survey. However, we estimate that, without the strike activity, payroll employment would have risen by about 7,000. Even more important, employment in manufacturing which was only slightly affected by strikes showed some strength for the first time since January, rising by 2,800 after seasonal adjustment.

| Labor Force Estimates | MINNESOTA<br>(Numbers in '000's) |          |                  | UNITED STATES<br>(Numbers in '000,000's) |          |                  |
|-----------------------|----------------------------------|----------|------------------|------------------------------------------|----------|------------------|
|                       | August<br>1983                   | Change   |                  | August<br>1983                           | Change   |                  |
|                       |                                  | Last Mo. | From<br>Year Ago |                                          | Last Mo. | From<br>Year Ago |
| Civilian Labor Force  | 2219.5                           | 13.8     | 20.3             | 113.6                                    | -0.4     | 1.7              |
| Employed              | 2059.0                           | 18.2     | 33.4             | 103.2                                    | -0.1     | 2.0              |
| Unemployed            | 160.5                            | -4.4     | -13.1            | 10.4                                     | -0.3     | -0.3             |
| Unemployment Rate     |                                  |          |                  |                                          |          |                  |
| Actual                | 7.2                              | -0.3     | -0.7             | 9.2                                      | -0.2     | -0.4             |
| Seasonally Adjusted   | n.a                              | n.a      | n.a              | 9.5                                      | 0.0      | -0.3             |

MN and the U.S., Employment & Unemployment Rate



MN, 1982 and 1983



# Minnesota Nonagricultural Wage & Salary Employment, Hours, and Earnings

| INDUSTRY                          | EMPLOYMENT <sup>1/</sup><br>(thousands) |              |              | PER CENT<br>CHANGE<br>FROM |              | PRODUCTION WORKERS' HOURS & EARNINGS |                               |                            |              |              |              |
|-----------------------------------|-----------------------------------------|--------------|--------------|----------------------------|--------------|--------------------------------------|-------------------------------|----------------------------|--------------|--------------|--------------|
|                                   |                                         |              |              |                            |              | Average<br>Weekly<br>Earnings        | Average<br>Hourly<br>Earnings | Average<br>Weekly<br>Hours |              |              |              |
|                                   | Aug.<br>1983                            | July<br>1983 | Aug.<br>1982 | July<br>1983               | Aug.<br>1982 | Aug.<br>1983                         | July<br>1983                  | Aug.<br>1983               | July<br>1983 | Aug.<br>1983 | July<br>1983 |
| <b>TOTAL NONAGRICULTURAL</b>      | 1708.3                                  | 1703.5       | 1704.6       | 0.3                        | 0.2          |                                      |                               |                            |              |              |              |
| <b>MANUFACTURING</b>              | 347.6                                   | 340.0        | 352.2        | 2.2                        | -1.3         | 377.30                               | 375.80                        | 9.48                       | 9.49         | 39.8         | 39.6         |
| Durable Goods                     | 202.1                                   | 199.2        | 205.1        | 1.5                        | -1.4         | 392.04                               | 385.12                        | 9.68                       | 9.58         | 40.5         | 40.2         |
| Furniture, Lumber and Wood        | 14.3                                    | 14.1         | 14.1         | 1.3                        | 1.3          | 437.84                               | 393.00                        | 10.40                      | 10.00        | 42.1         | 39.3         |
| Stone, Clay and Glass             | 8.5                                     | 8.4          | 8.9          | 0.2                        | -5.4         | 376.92                               | 376.71                        | 9.64                       | 9.61         | 39.1         | 39.2         |
| Primary Metals                    | 4.8                                     | 4.8          | 5.2          | -1.0                       | -8.6         | 332.35                               | 340.56                        | 8.61                       | 8.71         | 38.6         | 39.1         |
| Fabricated Metals                 | 32.9                                    | 32.8         | 33.1         | 0.3                        | -0.7         | 442.49                               | 436.89                        | 10.74                      | 10.63        | 41.2         | 41.1         |
| Nonelectrical Machinery           | 78.0                                    | 76.6         | 78.9         | 1.8                        | -1.2         | 392.40                               | 390.65                        | 9.01                       | 9.84         | 40.0         | 39.7         |
| Electrical Machinery              | 26.0                                    | 26.1         | 26.4         | -0.5                       | -1.5         | 346.72                               | 351.85                        | 8.54                       | 8.54         | 40.6         | 41.2         |
| Transportation Equipment          | 6.0                                     | 4.7          | 5.9          | 28.7                       | 2.1          | 439.49                               | 369.87                        | 10.59                      | 9.11         | 41.5         | 40.6         |
| Other Durable Goods <sup>2/</sup> | 31.8                                    | 31.7         | 32.6         | 0.2                        | -2.4         | 357.78                               | 357.60                        | 8.90                       | 8.94         | 40.2         | 40.0         |
| Nondurable Goods                  | 145.5                                   | 140.8        | 147.1        | 3.3                        | -1.1         | 359.58                               | 365.27                        | 9.22                       | 9.39         | 39.0         | 38.9         |
| Food and Kindred                  | 52.2                                    | 48.1         | 53.3         | 8.5                        | -2.0         | 319.19                               | 331.85                        | 8.04                       | 8.38         | 39.7         | 39.6         |
| Textile and Apparel               | 4.8                                     | 4.7          | 4.8          | 3.5                        | 0.3          | 216.09                               | 214.29                        | 6.07                       | 6.14         | 35.6         | 34.9         |
| Paper and Allied                  | 32.7                                    | 32.6         | 32.5         | 0.3                        | 0.4          | 462.01                               | 465.65                        | 10.67                      | 10.68        | 43.3         | 43.6         |
| Printing and Publishing           | 34.8                                    | 34.6         | 35.7         | 0.4                        | -2.7         | 354.96                               | 348.84                        | 10.20                      | 10.20        | 34.8         | 34.2         |
| Chemical and Petroleum            | 9.5                                     | 9.4          | 9.4          | 0.8                        | 0.9          | 421.37                               | 422.22                        | 10.86                      | 10.91        | 38.8         | 38.7         |
| Rubber and Leather                | 11.5                                    | 11.3         | 11.3         | 1.3                        | 1.9          | 308.63                               | 313.01                        | 8.23                       | 8.13         | 37.5         | 38.5         |
| <b>NONMANUFACTURING</b>           | 1360.7                                  | 1363.5       | 1352.5       | -0.2                       | 0.6          |                                      |                               |                            |              |              |              |
| Mining and Quarrying              | 9.2                                     | 10.4         | 6.2          | -11.8                      | 48.2         | 425.01                               | 425.43                        | 12.04                      | 12.19        | 35.3         | 34.9         |
| Metal Mining                      | 6.8                                     | 8.1          | 4.0          | -15.2                      | 70.3         | 421.82                               | 421.82                        | 13.10                      | 13.10        | 32.2         | 32.2         |
| Construction                      | 72.2                                    | 69.6         | 69.1         | 3.8                        | 4.6          | 576.31                               | 584.89                        | 14.59                      | 14.77        | 39.5         | 39.6         |
| Building                          | 19.0                                    | 18.8         | 18.8         | 0.7                        | 0.8          | 514.37                               | 534.88                        | 13.43                      | 13.75        | 38.3         | 38.9         |
| Highway and Heavy                 | 16.4                                    | 15.3         | 13.9         | 7.3                        | 17.7         | 609.74                               | 592.73                        | 13.46                      | 13.29        | 45.3         | 44.6         |
| Special Trades                    | 36.9                                    | 35.5         | 36.3         | 4.0                        | 1.5          | 593.44                               | 609.99                        | 15.91                      | 16.18        | 37.3         | 37.7         |
| Transportation                    | 58.6                                    | 58.7         | 59.0         | 0                          | -0.6         |                                      |                               |                            |              |              |              |
| Railroads                         | 12.9                                    | 13.1         | 13.4         | -1.5                       | -3.8         | 535.44                               | 535.44                        | 11.64                      | 11.64        | 46.0         | 46.0         |
| Trucking and Warehousing          | 23.3                                    | 23.0         | 23.3         | 1.5                        | 0            | 427.49                               | 429.39                        | 11.68                      | 11.70        | 36.6         | 36.7         |
| Public Utilities                  | 25.2                                    | 33.1         | 34.2         | -23.9                      | -26.4        | 514.70                               | 504.66                        | 12.74                      | 12.43        | 40.4         | 40.6         |
| Communications                    | 10.9                                    | 18.9         | 20.0         | -42.2                      | -45.3        | 468.93                               | 468.93                        | 11.55                      | 11.55        | 40.6         | 40.6         |
| Elec., Gas and Sanitary           | 14.2                                    | 14.2         | 14.2         | 0.4                        | 0.1          | 543.50                               | 544.85                        | 13.52                      | 13.42        | 40.2         | 40.6         |
| Trade                             | 440.0                                   | 435.6        | 437.3        | 1.0                        | 0.6          | 225.22                               | 226.44                        | 7.36                       | 7.40         | 30.6         | 30.6         |
| Retail                            | 325.7                                   | 322.9        | 321.7        | 0.9                        | 1.3          | 180.06                               | 178.79                        | 6.34                       | 6.34         | 28.4         | 28.2         |
| General Merchandise               | 43.4                                    | 43.1         | 43.8         | 0.7                        | -1.0         | 174.33                               | 167.61                        | 5.85                       | 5.84         | 29.8         | 28.7         |
| Food Stores                       | 46.7                                    | 46.6         | 45.9         | 0.1                        | 1.8          | 210.98                               | 211.12                        | 7.25                       | 7.23         | 29.1         | 29.2         |
| Automotive                        | 34.6                                    | 34.5         | 34.3         | 0.5                        | 1.0          | 281.43                               | 284.62                        | 7.95                       | 8.04         | 35.4         | 35.4         |
| Eating and Drinking               | 110.7                                   | 109.6        | 109.6        | 1.1                        | 1.0          | 103.21                               | 103.67                        | 4.67                       | 4.67         | 22.1         | 22.2         |
| Wholesale                         | 114.3                                   | 112.7        | 115.6        | 1.4                        | -1.2         | 382.85                               | 390.33                        | 9.97                       | 10.06        | 38.4         | 38.8         |
| F.I.R.E.                          | 99.5                                    | 99.2         | 98.9         | 0.4                        | 0.7          |                                      |                               |                            |              |              |              |
| Finance                           | 47.8                                    | 47.6         | 46.3         | 0.4                        | 3.2          |                                      |                               |                            |              |              |              |
| Insurance                         | 35.3                                    | 35.2         | 35.6         | 0.4                        | -1.0         |                                      |                               |                            |              |              |              |
| Real Estate                       | 16.5                                    | 16.4         | 16.9         | 0.4                        | -2.6         |                                      |                               |                            |              |              |              |
| Service Industries                | 393.7                                   | 391.4        | 383.8        | 0.6                        | 2.6          |                                      |                               |                            |              |              |              |
| Hotel and Lodging                 | 23.1                                    | 22.7         | 22.6         | 1.9                        | 2.2          |                                      |                               |                            |              |              |              |
| Business Services                 | 58.5                                    | 58.4         | 56.8         | 0.1                        | 3.0          |                                      |                               |                            |              |              |              |
| Health Services                   | 136.3                                   | 136.1        | 133.7        | 0.1                        | 1.9          |                                      |                               |                            |              |              |              |
| Private Education                 | 18.8                                    | 18.6         | 18.5         | 0.8                        | 1.6          |                                      |                               |                            |              |              |              |
| Soc. Serv., Museums etc.          | 84.3                                    | 83.9         | 82.0         | 0.5                        | 2.9          |                                      |                               |                            |              |              |              |
| Government                        | 262.3                                   | 265.6        | 264.1        | -1.2                       | -0.7         |                                      |                               |                            |              |              |              |
| Federal                           | 30.0                                    | 29.9         | 31.1         | 0.2                        | -3.5         |                                      |                               |                            |              |              |              |
| State                             | 62.6                                    | 62.6         | 61.2         | 0                          | 2.3          |                                      |                               |                            |              |              |              |
| Local                             | 169.7                                   | 173.1        | 171.8        | -1.9                       | -1.2         |                                      |                               |                            |              |              |              |

<sup>1/</sup> Totals may not add because of rounding.

<sup>2/</sup> Includes Scientific Instruments and Miscellaneous Industries.



# Labor Force Data: State, SMSAs, and Counties

| Area or County                             | August, 1983 Prelim.         |        |             | Area or County          | August, 1983 Prelim.         |        |             |
|--------------------------------------------|------------------------------|--------|-------------|-------------------------|------------------------------|--------|-------------|
|                                            | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |                         | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |
| <u>State of Minnesota</u>                  | 2219563                      | 160527 | 7.2         | Lake                    | 4621                         | 1528   | 33.1        |
| <u>Metropolitan Areas</u>                  |                              |        |             | Lake of the Woods       | 2021                         | 137    | 6.8         |
| Duluth/Superior<br>(Duluth City Only)      | 36456                        | 4110   | 11.3        | Le Sueur                | 13855                        | 981    | 7.1         |
| Fargo/Moorhead<br>(Clay County, MN Only)   | 28348                        | 2369   | 8.4         | Lincoln                 | 4167                         | 181    | 4.3         |
| Minneapolis/St. Paul SMSA <sup>2/</sup>    | 1185152                      | 75731  | 6.4         | Lyon                    | 15494                        | 829    | 5.4         |
| Rochester SMSA <sup>3/</sup> (Olmsted Co.) | 60845                        | 3030   | 5.0         | McLeod                  | 18824                        | 1093   | 5.8         |
| St. Cloud SMSA <sup>3/</sup>               | 79506                        | 6716   | 8.4         | Mahnomen                | 3074                         | 295    | 9.6         |
| <u>Counties</u>                            |                              |        |             | Marshall                | 6796                         | 724    | 10.7        |
| Aitkin                                     | 5830                         | 776    | 13.3        | Martin                  | 14809                        | 886    | 6.0         |
| Anoka                                      | 112862                       | 7836   | 6.9         | Meeker                  | 12499                        | 983    | 7.9         |
| Becker                                     | 13024                        | 1334   | 10.2        | Mille Lacs              | 9230                         | 844    | 9.1         |
| Beltrami                                   | 16427                        | 1229   | 7.5         | Morrison                | 13153                        | 1215   | 9.2         |
| Benton                                     | 12220                        | 990    | 8.1         | Mower                   | 18470                        | 1290   | 7.0         |
| Big Stone                                  | 4294                         | 251    | 5.8         | Murray                  | 6681                         | 386    | 5.8         |
| Blue Earth                                 | 29183                        | 1785   | 6.1         | Nicollet                | 14822                        | 718    | 4.8         |
| Brown                                      | 16406                        | 1044   | 6.4         | Nobles                  | 12481                        | 539    | 4.3         |
| Carlton                                    | 12043                        | 1417   | 11.8        | Norman                  | 4945                         | 254    | 5.1         |
| Carver                                     | 20961                        | 1110   | 5.3         | Olmsted                 | 60845                        | 3030   | 5.0         |
| Cass                                       | 11370                        | 1032   | 9.1         | Otter Tail              | 25839                        | 1859   | 7.2         |
| Chippewa                                   | 7545                         | 513    | 6.8         | Pennington              | 6571                         | 554    | 8.4         |
| Chisago                                    | 14693                        | 912    | 6.2         | Pine                    | 10245                        | 939    | 9.2         |
| Clay                                       | 28348                        | 2369   | 8.4         | Pipestone               | 5885                         | 244    | 4.1         |
| Clearwater                                 | 4258                         | 586    | 13.8        | Polk                    | 16055                        | 1552   | 9.7         |
| Cook                                       | 2505                         | 244    | 9.7         | Pope                    | 5970                         | 374    | 6.3         |
| Cottonwood                                 | 7876                         | 690    | 8.8         | Ramsey                  | 263596                       | 17219  | 6.5         |
| Crow Wing                                  | 18307                        | 1756   | 9.6         | Red Lake                | 2310                         | 330    | 14.3        |
| Dakota                                     | 110810                       | 6795   | 6.1         | Redwood                 | 11099                        | 563    | 5.1         |
| Dodge                                      | 9100                         | 681    | 7.5         | Renville                | 16582                        | 956    | 5.8         |
| Douglas                                    | 14272                        | 893    | 6.3         | Rice                    | 24195                        | 1679   | 6.9         |
| Faribault                                  | 11979                        | 617    | 5.2         | Rock                    | 5994                         | 217    | 3.6         |
| Fillmore                                   | 12985                        | 832    | 6.4         | Roseau                  | 6157                         | 420    | 6.8         |
| Freeborn                                   | 18590                        | 1466   | 7.9         | St. Louis (Inc. Duluth) | 92284                        | 14833  | 16.1        |
| Goodhue                                    | 20426                        | 1464   | 7.2         | Scott                   | 24775                        | 1313   | 5.3         |
| Grant                                      | 3739                         | 183    | 4.9         | Sherburne               | 14534                        | 1199   | 8.2         |
| Hennepin                                   | 539260                       | 34802  | 6.5         | Sibley                  | 8826                         | 474    | 5.4         |
| Houston                                    | 10624                        | 529    | 5.0         | Stearns                 | 52752                        | 4527   | 8.6         |
| Hubbard                                    | 6231                         | 696    | 11.2        | Steele                  | 17210                        | 1198   | 7.0         |
| Isanti                                     | 10373                        | 907    | 8.7         | Stevens                 | 6024                         | 242    | 4.0         |
| Itasca                                     | 18525                        | 2438   | 13.2        | Swift                   | 7767                         | 493    | 6.3         |
| Jackson                                    | 8317                         | 529    | 6.4         | Todd                    | 12518                        | 900    | 7.2         |
| Kanabec                                    | 5402                         | 563    | 10.4        | Traverse                | 3026                         | 161    | 5.3         |
| Kandiyohi                                  | 18961                        | 1235   | 6.5         | Wabasha                 | 10324                        | 625    | 6.1         |
| Kittson                                    | 3619                         | 286    | 7.9         | Wadena                  | 5744                         | 524    | 9.1         |
| Koochiching                                | 7570                         | 715    | 9.4         | Waseca                  | 10127                        | 613    | 6.1         |
| Lac qui Parle                              | 6637                         | 324    | 4.9         | Washington              | 64412                        | 3555   | 5.5         |
|                                            |                              |        |             | Watsonwan               | 6982                         | 429    | 6.1         |
|                                            |                              |        |             | Wilkin                  | 4728                         | 305    | 6.5         |
|                                            |                              |        |             | Winona                  | 22881                        | 1918   | 8.4         |
|                                            |                              |        |             | Wright                  | 33783                        | 2189   | 6.5         |
|                                            |                              |        |             | Yellow Medicine         | 8009                         | 381    | 4.8         |

## Technical Notes:

<sup>1/</sup> Labor force data is computed according to BLS methodology. The method includes an adjustment to assure that the sum of the substate areas equals the separately estimated State total. This adjustment is Applied to all county and SMSA areas. County and area unemployment was multiplied by an adjustment factor of 1.69; employment was multiplied by 1.03. For a more detailed explanation see the Review of Labor and Economic Conditions, Vol. 4, No. 4, (February 1978 issue), p. 29.

<sup>2/</sup> Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright Counties.

<sup>3/</sup> Benton, Sherburne, and Stearns Counties.

# Selected Minnesota Program Statistics

## Characteristics of the Insured Unemployed

Tables 1 and 2 provide data on persons who filed a claim for unemployment compensation in Minnesota during the month. Only those claiming benefits from the regular State program are represented since data on the characteristics of Federal employees and veterans are not available.

The total number of claimants for unemployment benefits fell by 2,371 or 6.7 percent between July and August, somewhat less than the five year average drop of 10 percent from July to August. However, claimants in mining rose very sharply (58 percent) this August in contrast to an average decrease of 19 percent over the past five years. Meanwhile, the August decline in construction claimants was not as steep as in the Augusts of past years. Over-the-year, the total number of claimants fell by 30,662 or 48.3 percent. The drop from the year earlier was the sixth in a row and each over-the-year decline has been larger than that of the preceding month. However, it should be noted that the number of persons who have exhausted their benefits was at a very high level and we suspect that a considerable number of the unemployed were not previously employed long enough to collect benefits. September claim loads show continued overall declines, albeit at a slower pace than in July and August.

Table 1. Distribution of Insured Unemployed, By Age and Sex, August 1983

| Age Groups  | Number | Percent Distributions |            |                |
|-------------|--------|-----------------------|------------|----------------|
|             |        | Men of Totals         | Men of Men | Women of Women |
| TOTALS      | 32823  | 59.5                  | 100.0      | 100.0          |
| Under 45    | 24600  | 60.5                  | 76.2       | 73.2           |
| Under 25    | 5529   | 61.1                  | 17.3       | 16.2           |
| 25-34       | 11915  | 62.2                  | 37.9       | 33.9           |
| 35-44       | 7156   | 57.2                  | 21.0       | 23.1           |
| 45 and Over | 8223   | 56.6                  | 23.8       | 26.8           |
| 45-54       | 4552   | 55.7                  | 13.0       | 15.2           |
| 55 and Over | 3671   | 57.8                  | 10.8       | 11.6           |

Table 2. Distribution of Insured Unemployed By Industry and Occupation, August 1983

| Industry and Occupational Attachment | Number | Percent of Total | Percent Long-Term Unemployed <sup>1/</sup> | Women as Percent of Total |
|--------------------------------------|--------|------------------|--------------------------------------------|---------------------------|
| Total, All Industries                | 32823  | 100.0            | 26.4                                       | 41.0                      |
| Ag., For., Fish.                     | 323    | 1.0              | 16.7                                       | 33.3                      |
| Mining                               | 2009   | 6.1              | 20.7                                       | 4.0                       |
| Construction                         | 3127   | 9.5              | 19.7                                       | 6.7                       |
| Manufacturing                        | 8022   | 24.4             | 32.4                                       | 38.1                      |
| Pub. Utilities                       | 1713   | 5.2              | 27.0                                       | 29.4                      |
| Wholesale Trade                      | 2375   | 7.2              | 31.9                                       | 31.7                      |
| Retail Trade                         | 4982   | 15.2             | 31.5                                       | 48.2                      |
| Fin., Ins., Real Est.                | 1004   | 3.1              | 33.1                                       | 59.3                      |
| Services                             | 8104   | 24.7             | 20.4                                       | 63.3                      |
| Public Admin.                        | 623    | 1.9              | 20.2                                       | 56.2                      |
| Inf. Not Available                   | 541    | 1.7              | 4.6                                        | 36.8                      |
| Total, All Occupations               | 32823  | 100.0            | 26.4                                       | 41.0                      |
| Prof., Tech., Mgr.                   | 6772   | 20.6             | 24.3                                       | 50.6                      |
| Clerical                             | 4734   | 14.4             | 30.6                                       | 82.6                      |
| Sales                                | 1558   | 4.8              | 35.9                                       | 39.0                      |
| Services                             | 2982   | 9.1              | 25.4                                       | 56.4                      |
| Farm., For., Fish.                   | 225    | 0.7              | 16.1                                       | 25.3                      |
| Processing                           | 1420   | 4.3              | 48.1                                       | 29.5                      |
| Machine Trades                       | 1922   | 5.9              | 29.6                                       | 16.2                      |
| Benchwork                            | 2534   | 7.7              | 21.9                                       | 57.4                      |
| Structural Work                      | 4307   | 13.1             | 21.2                                       | 3.2                       |
| Misc.                                | 5842   | 17.8             | 23.0                                       | 20.0                      |
| Inf. Not Available                   | 527    | 1.6              | 29.1                                       | 41.8                      |

<sup>1/</sup> Long-Term unemployed refers to unemployment insurance claimants whose current spell of unemployment has lasted 15 weeks or longer.

## Job Service Applicant Supply and Demand

Table 3 compares Job Service (J.S.) job applicants with the J.S. job openings that existed at the end of the month. These comparisons are expressed as supply/demand ratios. Other things being equal, the greater the ratio of applicants to openings, the greater the competition has been for work within that occupational category. To put these ratios into context, the reader must remember that not only do job seekers and employers in general find jobs or recruit workers through other means, but those interested in certain kinds of jobs are particularly unlikely to use the J.S. For example, workers seeking professional and Managerial jobs are least likely to use the J.S., whereas employers usually recruit construction workers through union halls and hire teachers directly. Thus, the main value of Table 3 is that it reflects, for broad occupational groups, the relative labor market conditions that those using the J.S. encountered when seeking work.

Table 3. Experienced Supply/Job Openings Demand <sup>1/</sup>

| Occupation          | Applicants (Supply)<br>August 1983 | Job Openings (Demand)<br>August 1983 | Supply/Demand Ratio |           |
|---------------------|------------------------------------|--------------------------------------|---------------------|-----------|
|                     |                                    |                                      | June 1983           | June 1982 |
| Total               | 113776                             | 11775                                | 9.7                 | 6.9       |
| Prof., Tech., Mgr.  | 14655                              | 738                                  | 19.9                | 7.9       |
| Clerical            | 19196                              | 3023                                 | 6.3                 | 6.0       |
| Sales               | 5174                               | 2117                                 | 2.4                 | 3.2       |
| Dom. Services       | 2019                               | 216                                  | 9.3                 | 2.9       |
| Other Services      | 16274                              | 2700                                 | 6.0                 | 4.2       |
| Farm., Fish., For.  | 6047                               | 198                                  | 30.5                | 11.5      |
| Processing          | 2456                               | 596                                  | 4.1                 | 2.5       |
| Machine Trades      | 7713                               | 331                                  | 23.3                | 17.5      |
| Benchwork           | 7529                               | 322                                  | 23.4                | 18.7      |
| Structural Work     | 15067                              | 457                                  | 33.0                | 13.0      |
| Mtr. Frght., Trans. | 4853                               | 397                                  | 12.2                | 14.5      |
| Pkg. & Mat. Hndlg.  | 11171                              | 644                                  | 17.3                | 7.5       |
| Other               | 1622                               | 36                                   | 45.1                | 19.6      |

<sup>1/</sup> Inexperienced and improperly coded job applicants are not included in this table.

# REVIEW OF LABOR AND ECONOMIC CONDITIONS

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MINNESOTA DEPARTMENT OF ECONOMIC SECURITY

RESEARCH AND STATISTICAL SERVICES OFFICE

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Comments and other correspondence concerning the publication should be addressed to the Editor.

|                  |                                         |
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# Editorial Comment

## SOME BASIC LESSONS IN ECONOMICS

By R. Pinola

As with any form of economic activity, there are some basic lessons to be learned if aborted and misplaced policies are to be avoided. The case of Minnesota's iron ore mining industry is but one of many cases where the shock of economic reality has shattered euphoristic images that utopian flights of fancy have conjured up. Like sand castles, our economic fortunes are subject to the relentless erosion by forces that are not readily perceived or understood. Although it cannot provide tidy and painless solutions to problems caused by economic change, timely and well-designed research can yield valuable information which, if properly used, can help us adjust to change or at least mitigate its undesirable effects. Unfortunately, such research is too often deferred or unsupported until the economic malaise is upon us. 1/

Given the dynamic nature of the economy, it is obvious that industrial and economic policies and strategies should be predicated on a careful evaluation of factors that condition changes in the supply of and demand for goods and services. On the supply side, a nation or region may enjoy favorable terms of trade or a competitive advantage in the production of certain goods or services, but changes in technology, factor prices, and factor endowments can quickly erode such advantages. At the national level it can lead to pernicious balance of payments problems, currency devaluations, and a loss in flexibility to deal with pressing domestic issues. At the regional or area level it can lead to long-term stagnation and the concomitant problems of high unemployment and intergenerational poverty and dependency.

When the United States devalued the dollar in 1973, it did so to stem the flow of gold caused by an unacceptable balance of payments problem that reflected a deterioration in our competitive position in the production of goods and services. This deterioration was primarily the result of our failure to control escalating costs. Instead of directing attention to controlling costs of production, we found it easier to secure cost relief by manipulating aggregate demand through fiscal and monetary policy. Such relief ultimately became self-defeating since it put us further away from a solution to the basic problem. While devaluation provided temporary relief, it also failed to resolve the long-term problem. 2/ The end result was a predicted further deterioration in our competitive position and new bouts of deficits in our international trade accounts. Rather than meet the problem head-on, American industry continued to ratchet its prices to uncontrolled production costs. In this respect, the iron and steel industry exemplified the operational philosophy to shrinking markets brought on by increased competition from within as well as outside the industry. 3/

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1/ In the case of Northeastern Minnesota, a comprehensive economic study of the area, including the iron ore mining industry, was proposed in 1971 and again in 1976. However, it failed to receive the support of State and area agencies whose purpose is to promote economic development.

2/ It also introduced the possibility of retaliation and a return to "beggar-thy-neighbor" policies of the 1930s.

3/ Price-related substitution of other materials for steel and steel products, together with structural changes in the economy, has made the traditional linkage between steel output and aggregate economic activity more tenuous.

It would be easy to single out management for continuing to follow pricing and production strategies formulated in more halcyon days, but labor also exhibited "tunnel vision" in believing that a never-ending stream of wage and benefit increases could be wrung out of the system without compensating increases in productivity.

The problems created by runaway production costs at home, the diffusion of new technology among a wider circle of producers abroad, and product substitution were exacerbated by the multiple increases in energy prices by OPEC that came on the heels of the 1974 oil embargo. This had a particularly severe effect on Minnesota's iron ore industry which is a heavy user of thermal and electrical energy. In this context, it should be noted that the U.S. Bureau of Mines has estimated that energy costs as a percentage of operating costs in the production of iron pellets in the United States rose from 10 percent to 25 percent between 1973 to 1981. Since Minnesota's iron ore mining industry is almost exclusively devoted to producing pellets from low grade ores, it meant rapid increases in production costs unless savings in energy use or some other cost reductions could be achieved. <sup>4/</sup> Although producers of pellets have effected considerable savings in thermal energy usage, reductions in costs in other areas have been, at best, modest. Thus, the U.S. Bureau of Mines reports that although average hourly wages in Minnesota's iron ore mining industry rose from \$5.76 in 1974 to \$14.69 in 1982, productivity per ton of usable ore has remained flat or even declined.

Because of its bulk, the transport of iron ore and pellets comprises a large portion of operating costs. Estimates range from 20 to 40 percent of operating costs, with rail transport much higher than shipment by water, and ocean freight about one-fourth of the cost of lake freight. Since shipments of pellets from Minnesota's iron ore mines must first move 60 to 85 miles by rail, and thence from 600 to 900 miles by lake freight, reducing transport costs can only be achieved by increasing the capacity of lake freighters and/or improving dock loading and unloading facilities. Such improvements have already been largely made and its problematical what additional gains can be achieved. Moreover, while increasing the iron content of pellets can effectively reduce transport costs, it involves higher costs at the production end, an exercise whose benefits are not known or currently estimated.

What we are left with are two areas where further cost reductions in Minnesota's iron ore mining industry need more scrutiny. These are the reduction of labor costs through increases in productivity or the moderation of wage increases, and a reduction of taxes on the iron ore mining industry. In each case, decisions must be based on objective and documented research. It may even entail examining the efficacy of combining currently separate operations to achieve decreasing costs from more efficient use of some factors of production. Before misplaced policies and programs are formulated with the hope of capturing what once was, perhaps a hard look at economic realities is essential.

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<sup>4/</sup> Minnesota producers of pellets are also locked into contracts with public utility companies guaranteeing the purchase of electric power that is based on capacity demand. This means that power costs per ton of usable ore/pellets will rapidly rise as output falls below capacity.



# Research Summaries

## THE OCCUPATIONAL DISTRIBUTION OF MINNESOTA'S LABOR FORCE 1960 TO 1980

By B. Steuernagel

According to Census data, between 1960 and 1980 the Minnesota labor force expanded by over 690,000 people. Two out of every three new members of the labor force were women. This article summarizes changes in the occupational makeup of the labor force over the past two decades and compares growth rates for major occupational categories for males and females.

Table 1 below contains estimates of the Minnesota labor force by occupation for three time periods. Estimates for 1960 and 1970 have been adjusted to the 1980 Census Occupational Classification scheme. 1960 figures include people 14 years of age and older while 1970 and 1980 data include those 16 years and older. Table 2 compares the growth rates among the occupations for men and women.

Table 1

| Minnesota Labor force by Occupation 1960, 1970, 1980                             |           |              |         |         |                |         |                      |              |       |       |                |       |
|----------------------------------------------------------------------------------|-----------|--------------|---------|---------|----------------|---------|----------------------|--------------|-------|-------|----------------|-------|
|                                                                                  | Number    |              |         |         |                |         | Percent Distribution |              |       |       |                |       |
|                                                                                  | 1960      | Male<br>1970 | 1960    | 1980    | Female<br>1970 | 1960    | 1980                 | Male<br>1970 | 1960  | 1980  | Female<br>1970 | 1960  |
| Total, All Occupations                                                           | 1,137,434 | 945,328      | 886,431 | 855,918 | 579,682        | 410,019 | 100.0                | 100.0        | 100.0 | 100.0 | 100.0          | 100.0 |
| Exec., adm., mgr.                                                                | 146,067   | 124,441      | 104,813 | 57,813  | 25,221         | 16,252  | 12.8                 | 13.2         | 11.8  | 6.8   | 4.4            | 4.0   |
| Professional specialty                                                           | 121,297   | 98,574       | 58,462  | 116,433 | 81,813         | 52,758  | 10.7                 | 10.4         | 6.6   | 13.6  | 14.1           | 12.9  |
| Tech. and related support                                                        | 37,353    | 24,941       | 11,973  | 29,654  | 13,132         | 6,786   | 3.3                  | 2.6          | 1.4   | 3.5   | 2.3            | 1.7   |
| Sales                                                                            | 101,203   | 65,184       | 60,926  | 91,653  | 56,692         | 42,339  | 8.9                  | 6.9          | 6.9   | 10.7  | 9.8            | 10.3  |
| Adm. support, incl. cler.                                                        | 67,642    | 60,239       | 52,536  | 256,563 | 182,981        | 110,935 | 5.9                  | 6.4          | 5.9   | 30.0  | 31.6           | 27.1  |
| Priv. house. serv.                                                               | 293       | 286          | 945     | 7,067   | 15,446         | 27,602  | 0.0                  | 0.0          | 0.1   | 0.8   | 2.7            | 6.7   |
| Protect. serv. and other serv., excl.<br>priv. house.                            | 99,801    | 70,166       | 48,133  | 171,342 | 113,174        | 68,057  | 8.8                  | 7.4          | 5.4   | 20.0  | 19.5           | 16.6  |
| Farm., forest., and fish.                                                        | 95,066    | 103,975      | 169,385 | 16,220  | 8,391          | 15,016  | 8.4                  | 11.0         | 19.1  | 1.9   | 1.4            | 3.7   |
| Precision prod., craft, and repair                                               | 213,775   | 174,737      | 153,615 | 19,398  | 10,357         | 7,158   | 18.8                 | 18.5         | 17.3  | 2.3   | 1.8            | 1.7   |
| Machine oper., assem., inspect.                                                  | 96,057    | 87,926       | 70,452  | 63,121  | 56,254         | 33,890  | 8.4                  | 9.3          | 7.9   | 7.4   | 9.7            | 8.3   |
| Transport. and material moving                                                   | 83,330    | 67,304       | 62,808  | 5,644   | 1,742          | 579     | 7.3                  | 7.1          | 7.1   | 0.7   | 0.3            | 0.1   |
| Handlers, equip. cleaners, helpers,<br>and laborers                              | 73,034    | 67,416       | 62,443  | 17,583  | 13,431         | 8,057   | 6.4                  | 7.1          | 7.0   | 2.1   | 2.3            | 2.0   |
| Long-term unemployed                                                             | 2,516     | 140          |         | 3,427   | 1,048          |         | 0.2                  | 0.0          |       | 0.4   | 0.2            |       |
| Occupation not reported                                                          |           |              | 29,940  |         |                | 20,590  |                      |              | 3.4   |       |                | 5.0   |
| Source: Census of Population, Bureau of the Census, U.S. Department of Commerce. |           |              |         |         |                |         |                      |              |       |       |                |       |

Source: Census of Population, Bureau of the Census, U.S. Department of Commerce.

Table 2

| Percent Change in Minnesota Male and Female Labor Force, By Occupation, 1960-70 and 1970-80 |         |         |         |         |
|---------------------------------------------------------------------------------------------|---------|---------|---------|---------|
| Occupation                                                                                  | Male    |         | Female  |         |
|                                                                                             | 1960-70 | 1970-80 | 1960-70 | 1970-80 |
| Total, All Occupations                                                                      | 6.6     | 20.3    | 41.4    | 47.7    |
| Exec., adm., mgr.                                                                           | 18.7    | 17.4    | 55.2    | 129.2   |
| Professional specialty                                                                      | 68.6    | 23.1    | 55.1    | 42.3    |
| Tech. and related support                                                                   | 108.3   | 49.8    | 93.5    | 125.8   |
| Sales                                                                                       | 7.0     | 55.3    | 33.9    | 61.7    |
| Adm. support, incl. cler.                                                                   | 14.7    | 12.3    | 64.9    | 40.2    |
| Priv. house. serv.                                                                          | -69.7   | 2.4     | -44.0   | -54.2   |
| Protect. serv. and other serv., excl. priv. house.                                          | 45.8    | 42.2    | 66.3    | 51.4    |
| Farm., forest., and fish.                                                                   | -38.6   | -8.6    | -44.1   | 93.3    |
| Precision prod., craft, and repair                                                          | 13.7    | 22.3    | 44.7    | 87.3    |
| Machine oper., assem., inspect.                                                             | 24.8    | 9.2     | 66.0    | 12.2    |
| Transport. and material moving                                                              | 7.2     | 23.8    | 200.9   | 224.0   |
| Handlers, equip. cleaners, helpers, and laborers                                            | 8.0     | 8.3     | 66.7    | 30.9    |

Source: Census of Population, Bureau of the Census, U.S. Department of Commerce.

The fastest growing occupational group in the Minnesota labor force between 1960 and 1980 was technicians and related support occupations, such as computer programmers and legal assistants. The service occupations were the second fastest growing group over the time period, followed by professional and administrative support including clerical occupations. Although all four of these fast growing occupational groups experienced a decrease in their growth rate between 1970 and 1980 compared to the previous decade, this decrease was most pronounced in the professional category. The principal reason for the slowdown was the shifting demand for teachers, the largest professional occupation, caused by changing enrollment trends. Between 1960 and 1970, the number of teachers, excluding post-secondary, increased by 62.2 percent, from 36,368 to 58,975. During the next ten years, the number of teachers increased by 28.8 percent, from 58,975 to 75,977.

The two occupational groups which experienced the greatest decline over the twenty year period were private household service workers which declined by 74.2 percent and farming, forestry, and fishing occupations which dropped by 39.7 percent with practically all of the decrease occurring between 1960 and 1970. Looking back further in history reveals the dramatic evolution which Minnesota's labor force has undergone in the past forty years. In 1940, there were 279,937 farmers and farm laborers and 35,335 private household workers. Together they accounted for over one-third of the Minnesota labor force in 1940 while today they make up slightly over 5 percent.

The fastest growing occupational category for women over the 1960-1980 time span was transportation and material moving occupations which increased by a whopping 874.8 percent. This increase was primarily due to the increase in the number of female school bus drivers in the State, 2,772 in 1980 compared to only 270 in 1960. Despite this increase, females make up only slightly more than six percent of the State's total labor force in transportation occupations. The number of women in technical occupations increased by 337 percent and the number in executive, administrative, and managerial occupations increased by 255.7 percent. Among the technical occupations which grew rapidly over the two decades were computer programmers which increased from 38 in 1960 to 2,506, electrical and electronic technicians which grew from 52 to 743, dental hygienist which expanded from 185 to 1,103, and clinical lab technicians which grew from 1,313 to 4,505. Among executive and managerial occupations, the female labor force increased rapidly in the following specific areas: financial managers and bank officers (55 to 2,023), buyers (784 to 2,732), accountants (1,520 to 8,008), personnel managers (558 to 1,513), and public administration managers (596 to 1,444).

With these increases, the female proportion of the total number of executive, managerial, administrative, technical, and clerical workers has increased significantly. Over 28 percent of the managerial labor force was female in 1980 compared to just over 13 percent in 1960. About 79 percent of the 1980 administrative support labor force was female compared to about 68 percent in 1960. In 1980, about 44 percent of the technical labor force was female compared to 36 percent in 1960.

Despite these increases, the distribution of the female labor force remains much as it was 20 years ago. 50.8 percent of the female labor force was found in clerical and service jobs in 1980 compared to 50.4 percent in 1960. In the service category, women have moved from private household employment as maids to providing food, health, and cleaning services in hotels, restaurants, and hospitals.

# **The Job Market**

## **THE PRINTING AND PUBLISHING INDUSTRY.**

By B. Jones

Employment in the Printing and Publishing Industry has grown steadily over the past twenty years, with an annual average growth rate of 2.7 percent or 695 workers. This article will look at the composition, employment and occupational staffing patterns of the Printing and Publishing Industry in Minnesota.

### **The Industry**

The Printing and Publishing Industry is comprised of firms engaged in printing by one or more of the common processes, such as letterpress, lithography, gravure, or screen; and those establishments which perform services for the printing trade such as bookbinding, typesetting, engraving, photoengraving, and electrotyping. Also included in this group are establishments involved with publishing newspapers, books, and periodicals, regardless of whether or not they do their own printing.

Currently, there are over 1,300 Printing and Publishing establishments in Minnesota. These firms employ 35,400 workers, comprising approximately two percent of the State's nonagricultural wage and salary employment. A little more than two-thirds of this total work in the Twin Cities nine-county area.

From 1970 to 1978 employment in the Printing and Publishing Industry increased by 31 percent, compared to 23 percent for total employment for the State. However, the growth is expected to slow by nearly half during the 1978-85 time period, with employment projected to rise by only 18 percent. State total employment is anticipated to expand by 23 percent for the same time period.

Approximately 37 percent of the Industry employment is classified as commercial printing, 28 percent publishing and printing of newspapers, and ten percent printing and publishing of books. The remaining 25 percent is spread among printing and publishing of periodicals, greeting cards, manifold business forms, blank books, and service industry for the printing trades, such as typesetting, photoengraving, electrotyping, stereotyping, and lithographic platemaking.

### **Occupational Staffing Patterns**

Occupational staffing patterns for the Printing and Publishing Industry, as shown on Table 1 indicate that one third of all workers are craft workers. Clerical, Professional and Technical, and Operatives are the other major occupational groups in this industry.

Craft workers, particularly Printing Trade workers, comprise the biggest bulk (34 percent) of this Industry's employment. From 1970 to 1978 this occupational group expanded by 32 percent; approximately at the same rate as the Industry total (31 percent). However, from 1978 to 1985 the growth rate is expected to drop to eleven percent or seven percent less than total employment in this industry. The four largest occupations in this group are Printing Press Operators (30 percent), Compositors and Typesetters (28 percent), Bookbinders (11 percent), and Blue Collar Worker Supervisors (10 percent).



Clerical workers, the second largest occupational group, is expected to continue its steady growth. Employment of Clerical workers in Printing and Publishing advanced by 22 percent from 1970 to 1978, and is expected to climb another 25 percent by 1985. Nearly 60 percent of these workers are Secretaries (29.1 percent), Typists (12.2 percent), Proofreaders (8.6 percent), or Bookkeepers (8.3 percent).

An upward trend in the percent of Professional and Technical workers is noticeable on Table 1. They experienced the highest growth rate (54 percent) in this industry from 1970 to 1978, and are expected to increase another 25 percent by 1985. This group is dominated by one occupational category - Editors and Reporters. They comprise nearly one half of this group, other noteworthy occupations are Artists (17 percent), Photographers (10 percent), and Accountants (6 percent).

Among the remaining occupational groups, the number of Managers and Sales workers is predicted to continue growing at a slightly faster pace than total industry employment. By 1985 they should comprise 17.5 percent of total employment in the industry. On the other hand while Operatives are expected to increase in number, it will be at a slower rate than in previous years. The actual number of both Service workers and Laborers is expected to decline from 1978 to 1985. Eighty percent of the Service workers in this industry are Janitors. The Laborers are mainly Freight and Material Handlers (42.2 percent) and Stock Handlers (31.6 percent).

Table 1

Occupational Staffing Patterns For the Printing and Publishing Industry

| Occupational Groups                | Percent of Industry |      |      |
|------------------------------------|---------------------|------|------|
|                                    | 1970                | 1978 | 1985 |
| Professional, Technical, & Kindred | 11.7                | 13.8 | 14.7 |
| Managers, Officials, & Proprietors | 8.5                 | 9.5  | 9.8  |
| Sales                              | 7.8                 | 7.5  | 7.7  |
| Clerical                           | 21.2                | 19.8 | 21.2 |
| Craft & Kindred                    | 34.0                | 34.3 | 32.6 |
| Operatives                         | 13.6                | 12.6 | 12.1 |
| Service                            | 1.6                 | 1.2  | 0.9  |
| Laborers except Farm               | 1.6                 | 1.3  | 1.1  |
| Farm Laborers                      | 0.0                 | 0.0  | 0.0  |

SUPPLY/DEMAND FOR SPECIFIC OCCUPATIONS, OCTOBER, 1983<sup>1/</sup>

By S. Hamper

MINNESOTA

Shortage Occupations: commissioned sales persons#, experienced computer programmers and systems analysts#, experienced and highly skilled office clerical workers#

Surplus Occupations: retail sales clerks, machinists#, truck drivers#, welders#, laborers#, factory workers#

CENTRAL MINNESOTA

Shortage Occupations: commissioned sales persons#, experienced clerk typists and stenographers, live-in health aides

Surplus Occupations: retail sales clerks#, nurse aides, welders#, machinists#, factory laborers#

MINNEAPOLIS-ST. PAUL

Shortage Occupations: commissioned sales persons#, experienced computer programmers and systems analysts#, highly skilled clerical workers#, part-time hotel/restaurant workers such as bus boys and waiters/waitresses

Surplus Occupations: machinists#, truck drivers#, factory assemblers#, laborers#

NORTHEASTERN MINNESOTA

Shortage Occupations: none

Surplus Occupations: entry level managers#, teachers#, social workers#, sales clerks#, bookkeepers#, office clerks#, waiters/waitresses#, cooks#, maids#, food production workers#, machinists, welders#, heavy equipment operators#, maintenance mechanics#, auto and diesel mechanics#, truck drivers#, carpenters#, painters#, bricklayers#, electricians#, pipefitters#, millwrights#, mining crafts#, laborers: construction, general, and mining#

NORTHWESTERN MINNESOTA

Shortage Occupations: commissioned sales persons, experienced clerk typists and stenographers, live-in health aides#, experienced heating/air conditioning mechanics

Surplus Occupations: retail sales clerks, nurse aides, welders#, factory laborers#

SOUTHERN MINNESOTA

Shortage Occupations: commissioned sales persons#, various engineering positions

Surplus Occupations: office clerks#, general laborers#

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1/ Shortage occupations are those that are difficult to fill or go unfilled due to the lack of qualified applicants. Surplus occupations are those in which the number of qualified applicants greatly exceeds the number of openings.

# This occupation has been listed as a shortage or surplus occupation in at least two out of the last three quarters of the Review.



# Feature Article

## PROBLEMS IN DEVELOPING INDUSTRY AND OCCUPATIONAL EMPLOYMENT PROJECTIONS

By Bev Jones\*

### INTRODUCTION

The 1990 Minnesota and Minneapolis-St. Paul industry and occupational projections will be available in Spring 1984. Because increased attention is being given to the projections for career choice and planning manpower programs, some attention should be given to the projections methodology. The methodology used for the projections is not without problems. This article will briefly describe the projections methodology and then look at its major problems and limitations. The first section will examine the industry projections and the second will deal with problems related to occupational projections.

### METHODOLOGY

The Data Analysis System for Industry Employment (DASIE), a software package provided by the Bureau of Labor Statistics (BLS), was used in developing and evaluating State and area industry projections. <sup>1/</sup> The DASIE program was designed to provide:

1. A listing of industry employment time series data and projections for the Nation, State, and desired Labor Market Areas that can be easily updated.
2. The area analysis program which was designed to familiarize the analyst with the State or Area as a whole by analyzing historical trends in total industry employment and its composition.
3. Analysis of individual industries in detail through the use of the industry analysis program and five different shift-share models.
4. A means of formulating models and the ability to run specialized projections programs when standard programs were not satisfactory.

The methodology used by State employment security agencies to produce occupational employment projections was developed by the Bureau of Labor Statistics, U.S. Department of Labor in the 1960s. It is a variant of the fixed coefficient "manpower requirements" model that is used in both the U.S. and abroad to project manpower needs and is essentially an extension of the input/output model pioneered by Wassily Leontief in the mid-1930s. <sup>2/</sup> In its simplest form, the methodology used by the State employment security agencies involves the

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<sup>1/</sup> For a more complete explanation of this procedure, see DASIE ANALYSIS SYSTEM for INDUSTRY EMPLOYMENT - Users Manual (May 1981) Cap Gemini Inc.

<sup>2/</sup> It should be noted that the Leontief Input/output model, and the Input/output techniques that have been used for Inter-Industry analysis assume that not only labor, but other inputs are a linear function of output. That is to say, if output doubles, all inputs also double, and if output halves, all inputs halve.

\* This article was prepared by Bev Jones, Labor Market Analyst, Research and Statistical Services Office, Minnesota Department of Economic Security. The sections of this article on assumptions found on pages 11, 12, and 14 were written by R. Dinola, Director of Research and Statistical Services Office and were published in an earlier article noted in the bibliography.

mathematical merging of projections of industry employment with occupational staffing patterns (called coefficients of manpower requirements) for the projected year (i.e., 1990) and then summing the individual occupational estimates across all industries to obtain total employment by occupation.

The following is a brief outline of the four major steps used in producing the industry and occupational projections. 3/

1. Development of a historical series of wage and salary employment by industry for the years 1960 through 1982. This was accomplished by utilizing the data collected from business establishments through the Current Employment Statistics (CES) program and the ES-202 reports. 4/
2. Development of projections of employment for 335 industries for the State and Twin Cities area for 1990. The projections are made by a variety of methods.
3. Adjustment of wage and salary employment to total employment by industry. This was achieved by adjusting the wage and salary data to the "one person, one job" concept by excluding the secondary jobs of multiple jobholders, and by adding an estimate of workers with a job but on unpaid leave, as well as adding the number of self-employed, unpaid family workers, agricultural workers and domestics.
4. Development of occupational estimates by industry. This step is performed through the use of Census-based staffing pattern matrix containing approximately 500 occupations for all 335 industries.

#### INDUSTRY PROJECTIONS

Problems related to making industry employment projections fall into four major categories:

1. Developing a consistent historical employment series.
2. Limitations dictated by economic and social assumptions.
3. Establishment of relationships between employment data and other economic, social, and political variables.
4. Adjusting the nonagricultural wage and salary employment to total employment.

#### Historical Employment Series

The first problem that one runs into in producing industry projections is developing a consistent historical time series of employment at the desired level of industry detail. Firms are classified into different industrial categories

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3/ For a detailed explanation of the methodology used, see bibliography at end of this article.

4/ The CES program is administered by the Research and Statistical Services Office in cooperation with the Bureau of Labor Statistics, U.S. Department of Labor. The ES-202 is a report on monthly employment covered by the Minnesota Unemployment Insurance Law, also administered by the Research Office.

according to the product they produce or the service they perform. The system used is called the Standard Industrial Classification (SIC) coding system. Over the years changes have been made in this system. Unfortunately when major revisions are made it creates a break in the series. In 1972, there was a major revision of the SIC coding system. As a result, the employment series for 1960 to 1974 is on one code, the 1967 SIC code, and 1975 forward is on another, the 1972 SIC code. In order to make the data comparable, the industries affected by the code change have to be identified and relocated in the new classification. In the cases where an entire three digit SIC code was moved from one category to another, this was relatively easy. <sup>5/</sup> However, in many cases, only part of a three or four digit SIC code was to be moved. Ultimately in these cases, it was necessary to perform the tedious job of locating this employment by individual firm and moving it to the new industry category. This process had to be completed for 15 years of data.

In preparing the Minneapolis-St. Paul SMSA <sup>6/</sup> time series for the projections, there are two problems in addition to the ones mentioned above for the State. First, the historical time series is only available on a two or at most three-digit SIC code level prior to 1975. Secondly, the Census geographic definition of the Minneapolis-St. Paul SMSA changed from five counties to nine counties. Prior to 1974, the employment statistics for the Twin Cities area were based on a five county definition. As a result, four years of data, 1970 through 1973, was not compatible with the rest of the series. In order to extend the time series back to 1970, employment from the four "new" counties had to be collected and manually added to the original five county area. Additionally, county data had less detail than the metropolitan area. This necessitated some allocation of employment at the three and four digit level in order to complete the series.

#### Assumptions <sup>7/</sup>

There are three key factors that determine the level of employment and its occupational and industrial composition. These are: 1) change in the composition of aggregate demand, 2) the rate of economic growth, and 3) technological change. <sup>8/</sup> Each of these factors represent a complex relationship that exists between certain social and economic variables. Considerable interaction occurs between these factors which makes measurement of their effects difficult. Therefore, in order to produce industry and occupational projections, certain basis assumptions are necessary. Unfortunately, along with the assumptions there are also problems and disadvantages.

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<sup>5/</sup> The SIC coding system is set up on a division, two-digit, three digit, and four-digit industry code basis. For example: Manufacturing is a division; 35-Machinery Except Electrical, the two-digit; 352-Farm and Garden Machinery and Equipment, the three-digit; and 3534-Garden Tractors and Lawn and Garden Equipment, the four-digit.

<sup>6/</sup> The Minneapolis-St. Paul Standard Metropolitan Statistical Area (SMSA) currently consists of nine Minnesota Counties; namely, Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright. Previously it consisted of Anoka, Dakota, Hennepin, Ramsey, and Washington Counties.

<sup>7/</sup> K. Pinola & Bev Jones, "The Development and Use of Occupational Projections," The Review of Labor and Economic Conditions, Vol. 7, No. 3, November 1980.

<sup>8/</sup> Factors 1 and 2 will be covered in this section. Factor 3 relates to occupational projections and will be discussed in that section of this article.



### Assumption 1

Changes in the composition of aggregate demand will essentially follow the historical trend. Aggregate demand is here defined as the expenditure side of Gross National Product (GNP), and its composition the major components of GNP.

The main problem that makes our projection of industry employment difficult is that the linkages that exist between Minnesota industry employment and GNP and its components are not always well established. Thus, while we employ a variety of techniques (i.e., shift-share, location quotient, regression, and ratio analysis) to establish these linkages, we frequently need to rely on subjective assessments of the competitive position of Minnesota industry to render a final judgement. In addition, while some of the tertiary or services sector growth follows the national pattern, there are others that are unique to the State or region. Consequently, it is not always possible to simply link the composition of State economic activity to the composition of national aggregate demand.

### Assumption 2

The rate of economic growth will return to the long-term historical trend. This assumption is based on the behavior of the two primary forces that drive economic activity; namely, resource availability and productivity. Implicit in this assumption is that no severe shortages of capital and/or labor will occur, and that technological improvements will follow historical trends. On the other hand, an explicit assumption is made that labor force growth will moderate due to known population dynamics and a slowing down of labor force participation rates.

The problem with Assumption 2 is that both labor force growth and productivity are closely tied to the level of economic activity. Hence, a high degree of circular reasoning is involved in projecting the changes in the labor force, productivity, and output. To partially get around this problem, the Bureau of Labor Statistics assumes a national unemployment rate that approximates a full-employment economy. Such an assumption, while essential for their projections, may not bear any relation to reality. On the other hand, linking the state unemployment rate to the national rate is not a precise exercise, thus further complicating the projection of State industry estimates. The State analyst might be tempted to project an unemployment estimate that is not tied to the national rate, but this can only lead to inconsistent results if State industry employment estimates are linked to the national unemployment rate.

### Relationship Between Employment and Other Variables

Probably the most difficult problem in making industry employment projections is establishing relationships between industry employment and other available economic and social variables. Once the time series is reconciled and the assumptions are established, regression analysis is applied. Minnesota and Twin Cities industry employment were used as the dependent variables. Data series such as time, National industry employment, GNP, population, number of households, personal income, per capita income, disposable income, housing starts, unemployment rates, production workers hours, U.S. gross private domestic expenditures, and value of U.S. exports were used as independent variables. Shift-share analysis is also used.

All these exercises are performed in an effort to establish or discover some sort of relationship between employment and the different variables that can be used as predictors. The difficult part of this process is evaluating the results of the statistical analysis and recognizing strong or reliable relationships between variables that can be utilized in making industry projections.

### Adjustments to Wage and Salary Employment

The occupational matrix used for projecting employment includes the self-employed, unpaid family workers, farm workers, and domestic employees. The historical employment time series used in the industry projections is nonagricultural wage and salary employment only. Estimates of the ratio of self-employed and unpaid family workers to wage and salary employment by industry had to be made. This was done using the 1980 Census data with the Current Population Survey (CPS) data and labor force estimates used as controls. Estimates of the number of farm workers and domestics were also added to obtain the total number of jobs. Since these data sets did not agree, adjustments had to be made.

Another major problem is the allocation of government workers among the various industries. The Census concept of government employment by function or industry is utilized in the occupation-industry matrix; accordingly, the number of government workers in schools, hospitals, construction work, etc., had to be estimated and assigned to their respective industries. This concept is in contrast to the concept used in nonagricultural wage and salary work force series, in which all work for government agencies is considered a separate industry division, classified by employer: Federal, State, and local.

### Summary

Besides having to deal with less than ideal data on employment by industry, the number of self-employed, unpaid family workers, multiple jobholders, and the limitations of necessary economic assumptions, if one wishes to tie Minnesota employment to the National picture, one must choose from the three sets of industry projections produced by BLS. The three different scenarios, high growth, medium growth, and low growth are based on three different sets of economic assumptions.

Another problem area that has not been mentioned is that of recessions and booms. Because cyclical expansions and contractions in economic activity affect industries to different degrees, it is very difficult to make allowances for these swings. It is also nearly impossible to predict their severity or intensity.

In summary, the process of projecting industry employment is not a straightforward, precise mathematical or scientific process. At almost every stage of the procedure, decisions based on the analyst's knowledge and experience must be made.

## OCCUPATION PROJECTIONS

The occupational projections were prepared using the Industry/Occupation Employment Matrix approach. The matrix is a table showing the occupational staffing pattern of each industry, i.e., the ratio of employment in each occupation to total employment in the industry. The State and Minneapolis-St. Paul base period (1980) Industry/Occupation Employment Matrix was produced by the U.S. Bureau of Census. The matrix covers approximately 500 occupations cross-classified by 335 industry sectors.

The 1982 estimates and 1990 projections were developed following the procedure outlined below.

1. The 1980 State occupational patterns (ratios of individual occupational employment for each industry) were updated to 1985 by applying a national change factor computed from corresponding cells in the BLS National matrix.
2. To arrive at Minnesota and Minneapolis-St. Paul 1982 staffing patterns, straight line interpolation was applied to the Minnesota and Minneapolis-St. Paul 1980 and 1985 staffing patterns.
3. The resulting staffing patterns were applied to their respective industry employment controls for 1982. As National change factors for 1990 were not available, 1985 staffing patterns were used for the 1990 projections.
4. Occupational employment levels were then computed for both years by aggregating across industries.

### Assumptions 9/

In order to develop occupational projections, two assumptions in addition to the ones covered under Industry projections were made. They are:

#### Assumption 3

Inputs of production are always combined in fixed proportions. This is also known as the assumption of linearity between inputs and outputs. What this means is that if output increased by 25 percent, employment of each occupation in that industry would also increase by 25 percent. Although we know this to be untrue, there is insufficient data available to develop reliable staffing patterns that are functionally related to output changes.

#### Assumption 4

Changes in technology in a given industry occur uniformly over time between different geographic areas. The same relative change factors are assigned to the base year State staffing patterns as those projected for the Nation. It is unfortunate that current data systems are not equipped to provide more definite information on the diffusion of technology within a given industry. One would expect that over a period of time, differences in technology within an industry would be reduced and, except for climatological reasons, State and National staffing patterns would converge.

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9/ R. Pinola and Bev Jones, "The Development and Use of Occupational Projections," The Review of Labor and Economic Conditions, Vol. 7, No. 3, November 1980.



## Staffing Patterns

Two major inter-related problems surface when estimating the occupational distribution of employment by industry related to industrial expansion or contraction. First, there are no allowances made for changes that may occur in the occupational distribution within an industry. In reality, if an industry's employment were to double, it is highly unlikely that every occupation within that industry would also double.

Secondly, there are no provisions for introducing additional occupations into an industry that are not in the base year matrix. You can only change the employment level of occupations already in the matrix. The size of the industry influences the occupational distribution and composition of employment within that industry. Generally, larger industries have a greater occupational diversification than smaller ones. Therefore, large percent changes in small industrial cells are far more likely to lead to occupational estimates that are suspect than estimates for larger cells.

Although alterations of the staffing pattern ratios due to changes in the size of an industry are not incorporated into the methodology for estimating occupational employment requirements, adjustments are made for occupational staffing pattern changes that occur or are expected to occur over time. These adjustments, called "change factors", are applied directly to the staffing pattern matrix for the base year.

Again, there are two problems that should be noted relating to this step of the methodology:

1. Only projected national staffing pattern change factors are available. This makes it necessary to assume that Minnesota's staffing patterns are changing in the same direction and magnitude as the United States.
2. Currently projected National change factors for 1990 are not available. This necessitates the use of static staffing patterns for 1985 through 1990.

## Job Opening Estimates

Since one of the products of the projections program is an estimate of the number of job openings by occupation, a few words should be mentioned about the problems and limitations of these estimates. First, these job openings can be divided into two types: replacement requirements and growth requirements.

Replacement needs, which occur when workers shift occupations, change localities, or leave the labor force represent a significant portion of the total openings. Replacement needs produced by the projections program are only those openings due to persons leaving the labor force due to death, retirement, disability, or temporary withdrawal for personal reasons. This is commonly referred to as the "separation rate". Unfortunately, data limitations prevent reliable information about the number of openings created when workers shift occupations, yet such needs may be a larger source of job openings than growth, deaths and retirements combined.

Given the above observation, this poses the question: If occupational shifts and location changes cannot be taken into account when projecting job openings, how accurate a picture can be drawn with the partial data available? Since

separation rates vary not only from state to state, but from occupation to occupation, it follows that there will also be a variance in occupational shifts and location changes among states and occupations, making the task even more difficult. More research is needed in this area to develop data upon which openings created by shifts in occupations and changes in location can be estimated.

Replacement estimate problems are not limited to the lack of data on occupational shifts and location changes. There is also a lack of information on state occupational separation rates. The Bureau of Labor Statistics (BLS) estimates labor force separation rates by occupation and sex for the United States. These rates represent the net annual rates at which people withdraw from the labor force due to retirement, disability, family responsibility, or death. Briefly, the separation rate from the labor force for an occupation is computed by applying the age-specific rates by sex to the number employed in the occupation in each respective age-sex interval. This gives the number of separations which, when divided by the occupational employment total, results in a labor force separation rate for the occupation nationally. Because data that differentiate separation rates for specific occupations by State are not available, the BLS develops proxy rates by applying national age-and sex-specific separation data to the age and sex distribution of State employment in specific occupations. Although this methodology is an improvement over applying National occupational separation rates directly to State occupational employment (as was done in the past), separation rates by age and sex by occupation for Minnesota may not be the same as the Nation.

The other type of job opening, referred to as growth or expansion needs, are openings created by an increase in the number of persons employed as the result of industrial expansion. Stated simply, growth openings are the mathematical difference between the number of persons employed in a specific occupation in the reference or base year (1980 or 1982 in our case) and the projected year (1990). However, "growth requirements" can be due either to changes in industrial employment or changes in staffing pattern ratios. This can be determined only by a careful examination of detailed industry employment data.

### Summary

In summary, despite the described limitations, industry/occupational projections represent an extensive data base that can be a valuable resource to those interested in planning for the future. However, these projections should be used as a tool in planning and not as an end in themselves. They should be used as an indicator of probable directions of the economy based primarily on trends and not to represent precise point estimates of employment for each industry or occupation.

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# Brief Analysis Of Economic Conditions

## THE NATIONAL AND STATE ECONOMIES IN THE THIRD QUARTER

By B. Boyle

### Nation

Although some sectors of the economy were not as strong in the third quarter and October as in earlier months, developments in other areas, especially employment, unemployment and income, indicated that the recovery is still very solid. A number of economists believe that the fourth quarter growth in real gross national product will be considerably more than was forecast a month ago.

Labor market conditions have improved faster than economists had expected. The seasonally adjusted unemployment rate, which fell 0.5 of a percentage point to 8.8 percent in October, has declined by two full points since the recovery began in December. The recent 10 month drop in the rate was significantly larger than the declines in similar periods of the past four expansions. Although total employment (seasonally adjusted) did not increase in October, it has grown by 2.4 million since May and by 2.9 million since the low point of last December. Also, seasonally adjusted nonfarm payroll employment rose by 320,000 in October after a huge gain of 1,018,000 in September and has grown by 2.4 million since last December. The largest employment gains since the upturn began in December were in manufacturing (847,000), services (809,000) and trade (413,000).

Other indicators of economic activity showed varying degrees of strength in the third quarter and in October. The decelerations in the advances of real gross national product and industrial production were probably positive developments in that the earlier rates of expansion were not sustainable and that continued rapid growth might lead to renewed inflation. On the other hand, both retail sales and personal income showed considerable strength in September and October. Moreover, the index of leading indicators rose for the fourteenth consecutive month in October, climbing a healthy 0.8 percent.

### State

The Minnesota economy gathered strength in the third quarter as the unemployment rate began to drop below the year earlier levels in July and total employment showed increasingly larger over-the-year gains from August through October. In addition, seasonally adjusted nonfarm wage and salary employment rose very sharply in October after a strong increase in the third quarter.

Minnesota's seasonally unadjusted unemployment rate fell to 6.4 percent in October, down from 6.6 percent in September and averages of 8.3 percent and 7.1 percent in the second and third quarters, respectively. The June to October decline in the rate was the largest since labor force data were first computed in 1970. However, the current October rate was still high compared to the rates of past Octobers, only exceeded by the 7.3 percent of October, 1982. Also, unadjusted total employment which began to show over-the-year gains in August was a strong 4.1 percent above the year earlier level in October. This October's over-the-year increase was the largest since December 1973. Even more important, seasonally adjusted nonfarm payroll employment rose by a very robust 9,500 in October after a gain of 16,400 between June and September. Payroll employment has risen by 42,100 since the recent low in December but is still 52,000 below the pre-recession high in January, 1981. The largest employment gains since December were in trade (13,000), services (11,600) and manufacturing (8,400).



# Forecasts

## FORECASTS OF GNP AND MINNESOTA PAYROLL EMPLOYMENT

By C. Cline

Actual estimates for the third quarter of 1983, together with forecasts for the fourth quarter of 1983 through the third quarter of 1985 are reported in the table below. The errors between actual value and the one-quarter-ahead forecast for the third quarter are as follows: real GNP (+0.12 percent), total employment (-0.02 percent), Mining (+16.56 percent), Construction (-3.67 percent), Manufacturing (+0.47 percent), Transportation (+2.75 percent), Trade (-1.32 percent), Finance (+0.30 percent), Service (-0.37 percent), and Government (-0.18 percent). The forecast error is positive when the forecast value is larger than the actual estimate.

The forecasts continue to be for growth. Rates of growth over the four quarters beginning with the fourth quarter of 1983 are forecasted as 4.94 percent for real GNP and 5.09 percent for total Minnesota wage and salary employment. These represent a slowing in the growth rate of real GNP and a slight increase in the rate for Minnesota employment. This pattern is typical of the tendency of Minnesota employment growth to follow behind that of real GNP by about two quarters as reported by the publication, Cyclical Sensitivity in Minnesota, available upon request. (See the back cover of this publication.)

| Quarter         | Real GNP (Billions of 1972 Dollars) | MINNESOTA PAYROLL EMPLOYMENT, BY QUARTER<br>(In Thousands) |        |                       |               |                                                    |                            |                                   |          |            |
|-----------------|-------------------------------------|------------------------------------------------------------|--------|-----------------------|---------------|----------------------------------------------------|----------------------------|-----------------------------------|----------|------------|
|                 |                                     | Total Nonagricultural Wage & Salary                        | Mining | Contract Construction | Manufacturing | Transportation, Communications, & Public Utilities | Retail and Wholesale Trade | Finance, Insurance, & Real Estate | Services | Government |
| <b>CURRENT</b>  |                                     |                                                            |        |                       |               |                                                    |                            |                                   |          |            |
| 1983-III        | 1553.6                              | 1715.84                                                    | 9.06   | 71.09                 | 346.38        | 90.33                                              | 439.59                     | 99.30                             | 393.66   | 266.44     |
| <b>FORECAST</b> |                                     |                                                            |        |                       |               |                                                    |                            |                                   |          |            |
| 1983-IV         | 1584.99                             | 1744.41                                                    | 9.21   | 67.72                 | 340.98        | 94.08                                              | 443.05                     | 98.99                             | 398.71   | 287.10     |
| 1984-I          | 1605.62                             | 1711.66                                                    | 9.46   | 51.08                 | 337.30        | 93.26                                              | 431.45                     | 99.26                             | 395.76   | 288.39     |
| 1984-II         | 1625.71                             | 1777.68                                                    | 11.05  | 64.26                 | 346.14        | 94.96                                              | 453.03                     | 101.47                            | 409.41   | 289.42     |
| 1984-III        | 1646.75                             | 1803.38                                                    | 11.40  | 76.21                 | 364.26        | 94.67                                              | 457.71                     | 103.17                            | 414.28   | 267.78     |
| 1984-IV         | 1663.80                             | 1833.18                                                    | 11.04  | 72.35                 | 360.82        | 97.85                                              | 464.89                     | 103.10                            | 420.53   | 287.85     |
| 1985-I          | 1682.01                             | 1793.74                                                    | 10.54  | 54.44                 | 357.52        | 95.82                                              | 453.75                     | 103.38                            | 418.11   | 289.76     |
| 1985-II         | 1698.87                             | 1859.33                                                    | 11.90  | 68.28                 | 365.42        | 97.66                                              | 475.19                     | 105.68                            | 433.74   | 290.21     |
| 1985-III        | 1713.99                             | 1884.29                                                    | 12.05  | 80.25                 | 382.89        | 97.94                                              | 477.92                     | 107.33                            | 437.80   | 269.52     |

### Notes

1. These forecasts are produced using the Vector Autoregression model developed for Research by Rao Aiyagari.
2. The concept of employment forecasted is that of Nonagricultural Wage and Salary employment. The count represents the number of jobs held since the data is generated from a survey of employer payroll records. Groups included in labor force employment, but excluded here are the self employed, domestics, unpaid family workers, employees of nonprofit institutions, and those government workers not covered by unemployment insurance.
3. Employment forecasts are seasonally unadjusted values. Real GNP is seasonally adjusted.
4. Forecasts of major industry employment do not sum to the forecast of total wage and salary employment. This is due to random error in the forecasted values.
5. There is great diversity in the accuracy of our forecasts among the major industry division. More information on their accuracy can be obtained from the author on request.

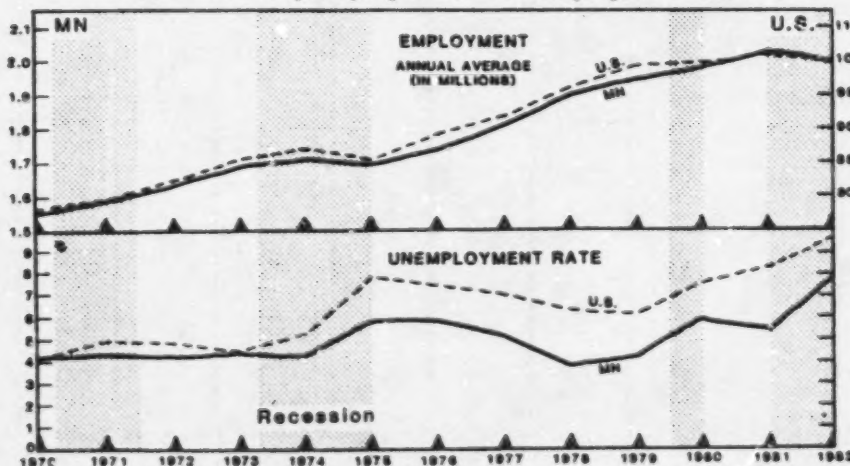
# Labor Force Statistics

| Labor Force Estimates | MINNESOTA<br>(Numbers in '000's) |          |          | UNITED STATES<br>(Numbers in '000,000's) |          |          |
|-----------------------|----------------------------------|----------|----------|------------------------------------------|----------|----------|
|                       | October<br>1983                  | Change   |          | October<br>1983                          | Change   |          |
|                       |                                  | Last Mo. | Year Ago |                                          | Last Mo. | Year Ago |
| Civilian Labor Force  | 2228.0                           | 9.0      | 65.3     | 112.1                                    | -0.1     | 1.3      |
| Employed              | 2086.3                           | 12.8     | 81.9     | 102.7                                    | 0.3      | 2.9      |
| Unemployed            | 141.7                            | -3.8     | -16.6    | 9.4                                      | -0.4     | -1.6     |
| Unemployment Rate     |                                  |          |          |                                          |          |          |
| Actual                | 6.4                              | -0.2     | -0.9     | 8.4                                      | -0.4     | -1.5     |
| Seasonally Adjusted   | n.a                              | n.a      | n.a      | 8.8                                      | -0.5     | -1.7     |

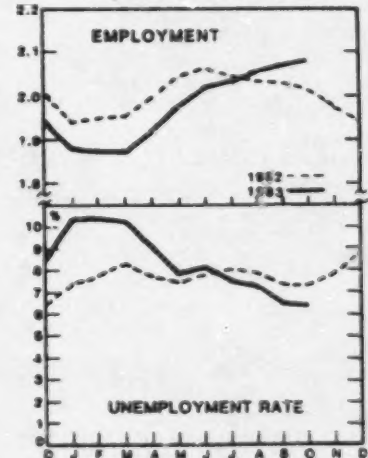
## Historical Labor Force Series

| Year | Minnesota<br>(Annual Average in '000's) |            |              |      | United States<br>(Annual Average in '000,000's) |            |              |      |
|------|-----------------------------------------|------------|--------------|------|-------------------------------------------------|------------|--------------|------|
|      | Labor Force                             | Employment | Unemployment |      | Labor Force                                     | Employment | Unemployment |      |
|      |                                         |            | Number       | Rate |                                                 |            | Number       | Rate |
| 1970 | 1625.0                                  | 1557.0     | 68.0         | 4.2  | 82.8                                            | 78.7       | 4.1          | 4.9  |
| 1971 | 1665.0                                  | 1593.0     | 73.0         | 4.4  | 84.4                                            | 79.4       | 5.0          | 5.9  |
| 1972 | 1709.0                                  | 1635.0     | 73.0         | 4.3  | 87.0                                            | 82.2       | 4.9          | 5.6  |
| 1973 | 1774.0                                  | 1694.0     | 80.0         | 4.5  | 89.4                                            | 85.1       | 4.4          | 4.9  |
| 1974 | 1779.0                                  | 1701.0     | 77.0         | 4.3  | 91.9                                            | 86.8       | 5.2          | 5.6  |
| 1975 | 1804.0                                  | 1697.0     | 107.0        | 5.9  | 93.8                                            | 85.8       | 7.9          | 8.5  |
| 1976 | 1849.0                                  | 1739.0     | 109.0        | 5.9  | 96.2                                            | 88.8       | 7.4          | 7.7  |
| 1977 | 1907.0                                  | 1809.0     | 97.0         | 5.1  | 99.0                                            | 92.0       | 7.0          | 7.1  |
| 1978 | 1979.0                                  | 1903.0     | 75.0         | 3.8  | 102.3                                           | 96.0       | 6.2          | 6.1  |
| 1979 | 2038.0                                  | 1953.0     | 85.0         | 4.2  | 105.0                                           | 98.8       | 6.1          | 5.8  |
| 1980 | 2108.0                                  | 1982.0     | 125.0        | 5.9  | 106.9                                           | 99.3       | 7.6          | 7.1  |
| 1981 | 2143.0                                  | 2024.0     | 118.0        | 5.5  | 103.7                                           | 100.4      | 8.3          | 7.0  |

MN and the U.S., Employment & Unemployment Rate



MN, 1982 and 1983



# Labor Market Conditions

The table and graphs in this section describe the behavior of the market for labor services in terms of its quantity, price, and supply. The quantity of labor services, which is the number of employed persons, is classified by industry. The price of labor services is roughly indicated by the industry wage.

Unemployment estimates provide a qualified measure of excess labor supply. The degree to which persons participate in the labor market and the effectiveness of the market in utilizing labor services are indicated by Labor Force Estimates and by Other Rates of Labor Utilization.

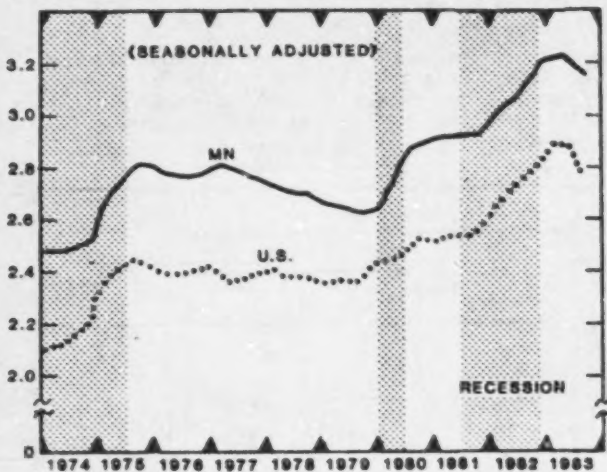
| Labor Force<br>And Establishment Data              | MINNESOTA<br>(Numbers in '000's) |                        |                                                                           | UNITED STATES<br>(Numbers in '000's) |                        |          |
|----------------------------------------------------|----------------------------------|------------------------|---------------------------------------------------------------------------|--------------------------------------|------------------------|----------|
|                                                    | III Qtr<br>1983                  | Percent Change<br>From |                                                                           | III Qtr<br>1983                      | Percent Change<br>From |          |
|                                                    |                                  | Last Qtr               | Year Ago                                                                  |                                      | Last Qtr               | Year Ago |
| <u>LABOR FORCE ESTIMATES</u>                       |                                  |                        |                                                                           |                                      |                        |          |
| Total Labor Force                                  | 2215.8                           | 2.9                    | 0.7                                                                       | 113252                               | 1.9                    | 1.4      |
| Employment                                         | 2059.0                           | 4.3                    | 1.5                                                                       | 102936                               | 2.9                    | 2.1      |
| Nonagricultural                                    | n.a                              | n.a                    | n.a                                                                       | 99049                                | 2.6                    | 2.1      |
| Agricultural                                       | n.a                              | n.a                    | n.a                                                                       | 3886                                 | 9.2                    | 0.9      |
| Unemployment                                       | 156.8                            | -12.4                  | -7.9                                                                      | 10316                                | -7.3                   | -4.6     |
| By Reason - New Reentrants-%*                      | n.a                              | n.a                    | n.a                                                                       | 34.6                                 | 3.9                    | 3.3      |
| By Reason - Quit-%*                                | n.a                              | n.a                    | n.a                                                                       | 7.5                                  | 5.6                    | 2.7      |
| By Reason - Lost-%*                                | n.a                              | n.a                    | n.a                                                                       | 57.9                                 | -2.7                   | -2.2     |
| Unemployment Rates                                 |                                  |                        |                                                                           |                                      |                        |          |
| Actual                                             | 7.1                              | -14.5                  | -7.8                                                                      | 9.1                                  | -9.0                   | -6.2     |
| Seasonally Adjusted                                | n.a                              | n.a                    | n.a                                                                       | 9.4                                  | -6.9                   | -6.0     |
| <u>OTHER RATES OF LABOR UTILIZATION</u>            |                                  |                        |                                                                           |                                      |                        |          |
| Participation Rt (Labor Force/Population 16+)      | n.a                              | n.a                    | n.a                                                                       | 64.3                                 | 0.6                    | 0.3      |
| Full Employment Deficit - Percent of Workers1/     | 3.1                              | 4.3                    | 3.7                                                                       | 5.1                                  | 6.0                    | 5.7      |
| Manpower Utilization Rate2/                        | 82.7                             | 1.2                    | 3.0                                                                       | 80.7                                 | 1.0                    | 1.4      |
| <u>NONAGRICULTURAL WAGE AND SALARIED POSITIONS</u> |                                  |                        |                                                                           |                                      |                        |          |
| Employment*                                        | 1706.8                           | 0.8                    | 0.5                                                                       | 90117                                | 0.7                    | 0.9      |
| Mining                                             | 8.6                              | -9.5                   | 32.3                                                                      | 1022                                 | 2.4                    | -8.2     |
| Construction                                       | 61.8                             | 5.8                    | 4.0                                                                       | 4015                                 | 4.0                    | 3.1      |
| Manufacturing                                      | 339.8                            | 0.9                    | -1.1                                                                      | 18790                                | 1.7                    | 0.6      |
| Durables                                           | 200.4                            | 0.8                    | -1.5                                                                      | 11017                                | 2.3                    | 0.4      |
| Nondurables                                        | 139.4                            | 1.0                    | -0.5                                                                      | 7773                                 | 0.8                    | 0.9      |
| Trans., Comm., & Public Utilities                  | 90.6                             | -2.9                   | -3.9                                                                      | 4781                                 | -4.2                   | -5.6     |
| Trade                                              | 434.7                            | 1.4                    | 0.8                                                                       | 20538                                | 0.7                    | 0.6      |
| Fin., Ins., & Real Estate                          | 98.3                             | 0.3                    | 0.4                                                                       | 5479                                 | 0.8                    | 2.5      |
| Services                                           | 390.8                            | 1.3                    | 2.6                                                                       | 19829                                | 1.4                    | 3.8      |
| Government                                         | 282.2                            | -0.4                   | -0.7                                                                      | 15663                                | -0.4                   | -0.3     |
| Average Weekly Hours*                              |                                  |                        |                                                                           |                                      |                        |          |
| Mining                                             | 33.9                             | 3.0                    | -10.8                                                                     | 42.6                                 | 1.2                    | 0.7      |
| Construction                                       | 38.2                             | 6.1                    | 4.1                                                                       | 38.1                                 | 2.1                    | 1.6      |
| Manufacturing                                      | 40.1                             | 2.6                    | 3.1                                                                       | 40.4                                 | 0.7                    | 3.6      |
| Durables                                           | 40.6                             | 2.0                    | 2.8                                                                       | 41.0                                 | 1.2                    | 4.1      |
| Nondurables                                        | 39.4                             | 2.9                    | 3.1                                                                       | 39.6                                 | 0.3                    | 2.9      |
| Trans., Comm., & Public Utilities                  | 38.4                             | 0.8                    | 1.1                                                                       | 39.0                                 | 0.3                    | 0.0      |
| Trade                                              | 30.0                             | -0.3                   | 2.4                                                                       | 31.8                                 | -0.3                   | -0.6     |
| Fin., Ins., & Real Estate                          | n.a                              | n.a                    | n.a                                                                       | 36.1                                 | -0.3                   | -0.3     |
| Services                                           | n.a                              | n.a                    | n.a                                                                       | 32.7                                 | -0.3                   | 0.0      |
| Average Hourly Wage                                |                                  |                        |                                                                           |                                      |                        |          |
| Mining                                             | 12.19                            | 1.4                    | -3.9                                                                      | 11.29                                | 0.4                    | 3.5      |
| Construction                                       | 14.59                            | -0.5                   | 1.5                                                                       | 11.87                                | 0.5                    | 1.8      |
| Manufacturing                                      | 9.52                             | -0.4                   | 4.4                                                                       | 8.85                                 | 0.7                    | 3.5      |
| Durables                                           | 9.72                             | 1.7                    | 5.7                                                                       | 9.41                                 | 0.7                    | 3.1      |
| Nondurables                                        | 9.27                             | -3.0                   | 2.9                                                                       | 8.09                                 | 0.7                    | 4.0      |
| Trans., Comm., & Public Utilities                  | 10.98                            | 0.2                    | 5.5                                                                       | 10.86                                | 1.2                    | 4.5      |
| Trade                                              | 7.31                             | 0.7                    | 5.2                                                                       | 6.49                                 | 0.5                    | 4.5      |
| Fin., Ins., & Real Estate                          | n.a                              | n.a                    | n.a                                                                       | 7.28                                 | 0.1                    | 6.4      |
| Services                                           | n.a                              | n.a                    | n.a                                                                       | 7.22                                 | 0.1                    | 4.3      |
| Estimates of Labor Turnover (Mfg. Only)            |                                  |                        | Estimates of Labor Turnover have been discontinued as of January 1, 1982. |                                      |                        |          |

a/ Values are numerical values, not percent changes.

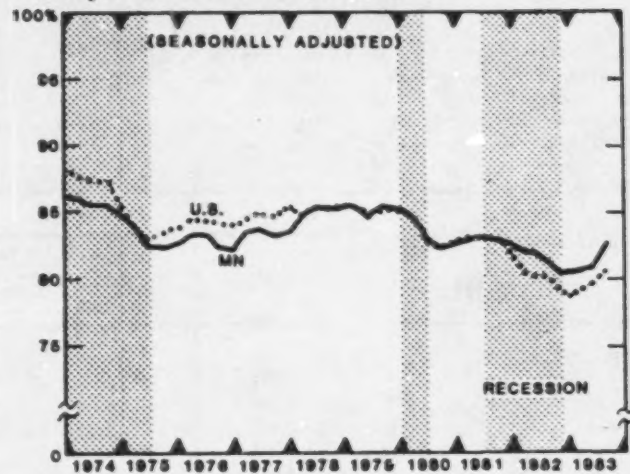


# Labor Market Conditions

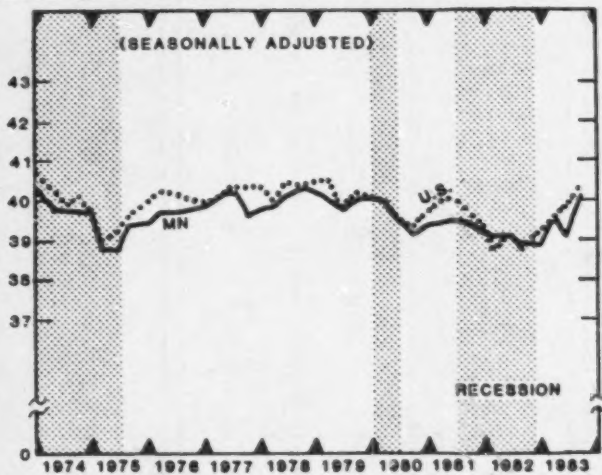
## Ratio of Service to Goods Producing Jobs



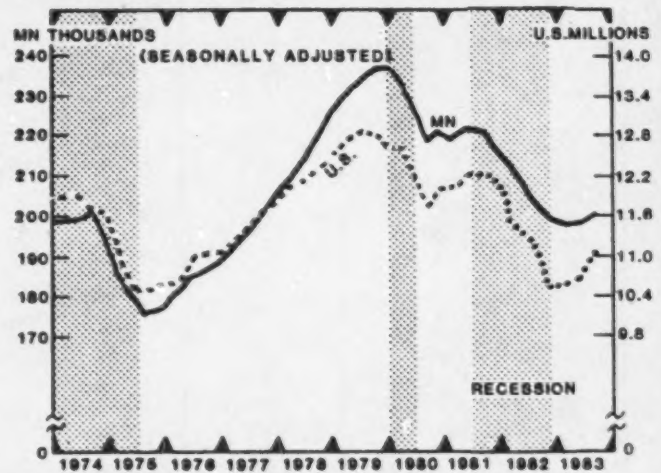
## Manpower Utilization Rate



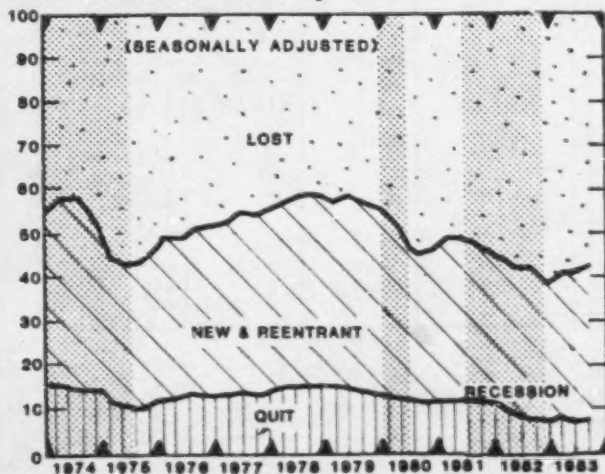
## Average Weekly Hours, Manufacturing



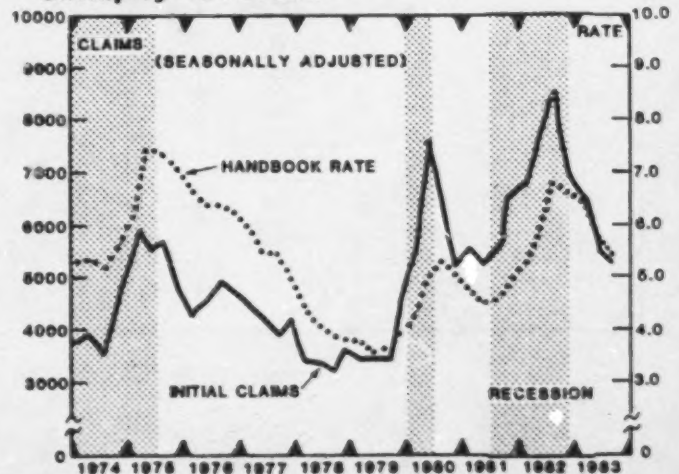
## Manufacturing Employment, Durable Goods



## U.S. Unemployment: Percent Distribution by Reason



## MN Weekly Initial Claims & Handbook Unemployment Rate<sup>1</sup>



# Labor Market Conditions

The Table below provides data on persons who file claims for unemployment compensation in Minnesota. Only those claiming benefits from the regular State program are represented, since data on the characteristics of Federal employees and veterans are not available, and data on those receiving benefits from

extended programs is reported only when those programs are in effect. If those receiving extended benefits were included they would distort the numerical comparisons over time, but would not substantially change the percentage distributions other than to increase the proportion of long-term unemployed.

| Persons Claiming Benefits | Third Quarter 1983 |                     |          | October 1983 |                     |          | Percent Long Term |
|---------------------------|--------------------|---------------------|----------|--------------|---------------------|----------|-------------------|
|                           | Number             | Percent Change From |          | Number       | Percent Change From |          |                   |
|                           |                    | Last Qtr.           | Year Ago |              | Month Ago           | Year Ago |                   |
| <u>By Age &amp; Sex</u>   |                    |                     |          |              |                     |          |                   |
| Male                      | 19579              | -41.7               | -51.1    | 18137        | 0.7                 | -51.2    | 20.3              |
| Under 45                  | 14858              | -42.8               | -52.7    | 13634        | 0.1                 | -52.7    | 18.3              |
| Under 25                  | 3302               | -49.8               | -58.9    | 2970         | 9.8                 | -59.5    | 13.6              |
| 25-34                     | 7399               | -43.1               | -53.1    | 6840         | -0.7                | -52.5    | 18.2              |
| 35-44                     | 4157               | -34.9               | -45.0    | 3824         | -4.9                | -46.0    | 22.1              |
| 45 and Over               | 4721               | -38.2               | -45.3    | 4503         | 2.6                 | -46.0    | 26.3              |
| 45-54                     | 2586               | -38.9               | -46.8    | 2597         | 6.2                 | -45.5    | 22.4              |
| 55 and Over               | 2135               | -37.4               | -43.4    | 1906         | -1.9                | -46.7    | 31.7              |
| Female                    | 12435              | -15.5               | -39.4    | 9603         | -4.2                | -44.1    | 28.7              |
| Under 45                  | 9116               | -15.6               | -41.3    | 7136         | -4.2                | -45.7    | 27.1              |
| Under 25                  | 2079               | -24.7               | -48.7    | 1810         | 4.0                 | -49.3    | 18.8              |
| 25-34                     | 4202               | -13.8               | -39.3    | 3280         | -5.7                | -44.0    | 28.8              |
| 35-44                     | 2835               | -10.5               | -38.0    | 2046         | -8.1                | -44.9    | 31.8              |
| 45 and Over               | 3319               | -15.3               | -33.4    | 2467         | -4.1                | -39.1    | 33.0              |
| 45-54                     | 1870               | -14.2               | -35.5    | 1402         | -3.4                | -40.5    | 30.0              |
| 55 and Over               | 1449               | -16.6               | -30.4    | 1065         | -5.0                | -37.1    | 37.0              |
| <u>By Industry</u>        |                    |                     |          |              |                     |          |                   |
| Ag., For., Fish.          | 32014              | -33.8               | -47.1    | 27740        | -1.0                | -48.9    | 23.2              |
| Mining                    | 325                | -54.2               | -32.2    | 364          | 16.3                | -34.5    | 12.5              |
| Construction              | 2146               | 38.6                | -72.9    | 3155         | -0.03               | -53.4    | 13.7              |
| Manufacturing             | 3203               | -67.0               | -46.5    | 2948         | 3.5                 | -50.0    | 11.8              |
| Pub. Utilities            | 8003               | -43.0               | -59.2    | 6382         | -3.0                | -64.3    | 22.3              |
| Wholesale Trade           | 1599               | -35.8               | -33.2    | 1029         | -8.1                | -46.2    | 26.7              |
| Retail Trade              | 2362               | -32.9               | -37.6    | 2048         | -1.1                | -43.7    | 30.3              |
| Fin., Ins., Real Est.     | 4747               | -24.0               | -20.7    | 3740         | -3.5                | -33.5    | 28.7              |
| Services                  | 986                | -15.9               | -25.9    | 909          | 0.9                 | -26.5    | 34.9              |
| Public Admin.             | 7398               | -0.5                | -37.0    | 5590         | -3.8                | -40.3    | 30.7              |
| Inf. Not Available        | 611                | -14.4               | -22.5    | 740          | 24.0                | -20.7    | 16.8              |
|                           | 634                | -16.6               | 26.8     | 835          | 10.7                | 61.2     | 1.7               |
| <u>By Occupation</u>      |                    |                     |          |              |                     |          |                   |
| Prof., Tech., Mgr.        | 32014              | -33.8               | -47.1    | 27740        | -1.0                | -48.9    | 23.2              |
| Clerical                  | 6279               | -0.02               | -36.4    | 4880         | -4.8                | 40.3     | 35.7              |
| Sales                     | 4591               | -12.0               | -32.6    | 3986         | -0.3                | -37.1    | 30.0              |
| Services                  | 1535               | -21.9               | -26.8    | 1348         | -1.1                | -30.0    | 30.8              |
| Farm., For., Fish.        | 2843               | -17.8               | -31.3    | 2571         | 7.9                 | -31.7    | 24.8              |
| Processing                | 228                | -58.5               | -29.2    | 300          | 31.0                | -30.2    | 10.1              |
| Machine Trade             | 1361               | -51.7               | -50.7    | 831          | -13.4               | -62.0    | 31.7              |
| Benchwork                 | 1984               | -40.5               | -60.4    | 1676         | -5.1                | -65.1    | 19.3              |
| Structural Work           | 2494               | -37.7               | -64.1    | 2145         | 3.2                 | -66.3    | 16.1              |
| Misc.                     | 4447               | -61.5               | -49.1    | 4030         | 2.2                 | -52.8    | 13.4              |
| Inf. Not Available        | 5738               | -32.9               | -58.0    | 5603         | -2.0                | -51.8    | 15.4              |
|                           | 514                | -13.0               | 179.3    | 370          | -19.4               | 102.2    | 39.0              |
| <u>By Duration</u>        |                    |                     |          |              |                     |          |                   |
| 0-14 Weeks                | 32014              | -33.8               | -47.1    | 27740        | -1.0                | -48.9    | 23.2              |
| 15+ Weeks (Long-Term)     | 23567              | -28.4               | -48.5    | 21304        | 2.9                 | -40.6    | 35.7              |
|                           | 8447               | -45.3               | -42.8    | 6436         | -12.0               | -65.2    | 30.0              |

# Labor Market Conditions

## Minnesota Nonagricultural Wage & Salary Employment, Hours, and Earnings

| INDUSTRY                          | EMPLOYMENT <sup>1/</sup><br>(thousands) |               |              | PER CENT<br>CHANGE<br>FROM |              | PRODUCTION WORKERS' HOURS & EARNINGS |               |                               |               |                            |               |
|-----------------------------------|-----------------------------------------|---------------|--------------|----------------------------|--------------|--------------------------------------|---------------|-------------------------------|---------------|----------------------------|---------------|
|                                   |                                         |               |              |                            |              | Average<br>Weekly<br>Earnings        |               | Average<br>Hourly<br>Earnings |               | Average<br>Weekly<br>Hours |               |
|                                   | Oct.<br>1983                            | Sept.<br>1983 | Oct.<br>1982 | Sept.<br>1983              | Oct.<br>1982 | Oct.<br>1983                         | Sept.<br>1983 | Oct.<br>1983                  | Sept.<br>1983 | Oct.<br>1983               | Sept.<br>1983 |
| <b>TOTAL NONAGRICULTURAL</b>      | 1741.6                                  | 1732.8        | 1712.9       | 0.5                        | 1.7          |                                      |               |                               |               |                            |               |
| <b>MANUFACTURING</b>              | 345.4                                   | 350.2         | 343.3        | -1.4                       | 0.6          | 392.69                               | 384.40        | 9.72                          | 9.61          | 40.4                       | 40.0          |
| Durable Goods                     | 204.9                                   | 203.6         | 201.9        | 0.6                        | 1.5          | 405.25                               | 403.03        | 9.86                          | 9.83          | 41.1                       | 41.0          |
| Furniture, Lumber and Wood        | 14.0                                    | 14.2          | 13.0         | -1.7                       | 7.1          | 408.83                               | 441.76        | 10.17                         | 10.37         | 40.2                       | 42.6          |
| Stone, Clay and Glass             | 8.4                                     | 8.5           | 8.8          | -1.1                       | -4.6         | 384.91                               | 377.91        | 9.72                          | 9.74          | 39.6                       | 38.8          |
| Primary Metals                    | 5.0                                     | 5.0           | 5.1          | 1.3                        | -0.6         | 365.66                               | 369.34        | 8.79                          | 8.67          | 41.6                       | 42.6          |
| Fabricated Metals                 | 33.5                                    | 33.3          | 33.0         | 0.6                        | 1.5          | 463.42                               | 459.68        | 11.14                         | 11.05         | 41.6                       | 41.6          |
| Nonelectrical Machinery           | 79.8                                    | 78.9          | 77.5         | 1.2                        | 3.1          | 409.94                               | 405.14        | 9.95                          | 9.93          | 41.2                       | 40.8          |
| Electrical Machinery              | 26.0                                    | 26.0          | 26.1         | 0.1                        | -0.1         | 350.24                               | 347.24        | 8.46                          | 8.49          | 41.4                       | 40.9          |
| Transportation Equipment          | 6.2                                     | 6.0           | 6.0          | 2.8                        | 3.7          | 498.70                               | 441.98        | 11.36                         | 10.65         | 43.9                       | 41.5          |
| Other Durable Goods <sup>2/</sup> | 31.9                                    | 31.7          | 32.4         | 0.7                        | -1.7         | 371.33                               | 373.18        | 9.26                          | 9.26          | 40.1                       | 40.3          |
| Nondurable Goods                  | 140.5                                   | 146.6         | 141.4        | -4.2                       | -0.6         | 375.88                               | 362.00        | 9.54                          | 9.33          | 39.4                       | 38.8          |
| Food and Kindred                  | 46.7                                    | 52.5          | 49.0         | -11.1                      | -4.8         | 336.15                               | 308.74        | 8.51                          | 8.04          | 39.5                       | 38.4          |
| Textile and Apparel               | 4.6                                     | 4.7           | 4.8          | -2.3                       | -2.6         | 237.46                               | 233.36        | 6.20                          | 6.19          | 38.3                       | 37.7          |
| Paper and Allied                  | 32.5                                    | 32.6          | 31.6         | -0.3                       | 2.7          | 472.33                               | 473.86        | 11.01                         | 11.02         | 42.9                       | 43.0          |
| Printing and Publishing           | 35.4                                    | 35.5          | 35.8         | -0.2                       | -1.0         | 376.25                               | 368.07        | 10.28                         | 10.31         | 36.6                       | 35.7          |
| Chemical and Petroleum            | 9.3                                     | 9.3           | 9.2          | -0.7                       | 0.7          | 429.63                               | 426.89        | 10.96                         | 10.89         | 39.2                       | 39.2          |
| Rubber and Leather                | 12.0                                    | 11.9          | 11.0         | 0.4                        | 9.0          | 311.00                               | 310.18        | 8.12                          | 8.12          | 38.3                       | 38.2          |
| <b>NONMANUFACTURING</b>           | 1396.2                                  | 1382.7        | 1369.6       | 1.0                        | 1.9          |                                      |               |                               |               |                            |               |
| Mining and Quarrying              | 7.7                                     | 7.6           | 6.9          | 1.0                        | 10.6         | 407.84                               | 409.86        | 11.96                         | 11.88         | 34.1                       | 34.5          |
| Metal Mining                      | 5.4                                     | 5.2           | 4.8          | 2.8                        | 12.1         | 418.21                               | 417.57        | 13.11                         | 13.09         | 31.9                       | 31.9          |
| Construction                      | 71.7                                    | 71.6          | 65.9         | 0.1                        | 8.8          | 554.19                               | 549.82        | 14.70                         | 14.86         | 37.7                       | 37.0          |
| Building                          | 19.7                                    | 19.0          | 18.2         | 3.6                        | 8.4          | 514.32                               | 504.05        | 13.29                         | 13.66         | 38.7                       | 36.9          |
| Highway and Heavy                 | 15.1                                    | 15.7          | 12.5         | -3.8                       | 21.6         | 524.89                               | 525.28        | 13.39                         | 13.40         | 39.2                       | 39.2          |
| Special Trades                    | 36.9                                    | 36.9          | 35.3         | 0                          | 4.6          | 589.84                               | 585.36        | 16.16                         | 16.26         | 36.5                       | 36.0          |
| Transportation                    | 62.6                                    | 61.7          | 62.0         | 1.5                        | 0.9          |                                      |               |                               |               |                            |               |
| Railroads                         | 13.4                                    | 13.4          | 13.2         | 0                          | 1.1          | 521.19                               | 521.19        | 11.48                         | 11.48         | 45.4                       | 45.4          |
| Trucking and Warehousing          | 23.8                                    | 23.6          | 23.6         | 0.8                        | 1.0          | 442.68                               | 443.05        | 11.90                         | 11.91         | 37.2                       | 37.2          |
| Public Utilities                  | 32.9                                    | 33.3          | 33.8         | -1.1                       | -2.5         | 505.85                               | 505.04        | 12.49                         | 12.47         | 40.5                       | 40.5          |
| Communications                    | 18.7                                    | 19.0          | 19.7         | -1.6                       | -5.2         | 469.85                               | 469.45        | 11.63                         | 11.62         | 40.4                       | 40.4          |
| Elec., Gas and Sanitary           | 14.3                                    | 14.3          | 14.1         | -0.4                       | 1.4          | 545.26                               | 644.04        | 13.43                         | 13.40         | 40.6                       | 40.6          |
| Trade                             | 439.4                                   | 442.2         | 430.0        | -0.6                       | 2.2          | 226.50                               | 225.46        | 7.33                          | 7.32          | 30.9                       | 30.8          |
| Retail                            | 327.1                                   | 329.1         | 317.8        | -0.6                       | 2.9          | 182.82                               | 182.19        | 6.37                          | 6.37          | 28.7                       | 28.6          |
| General Merchandise               | 46.2                                    | 44.7          | 44.7         | 3.4                        | 3.4          | 167.61                               | 172.86        | 5.84                          | 5.92          | 28.7                       | 29.2          |
| Food Stores                       | 45.8                                    | 46.7          | 44.5         | -1.9                       | 3.0          | 208.85                               | 211.35        | 7.38                          | 7.39          | 28.3                       | 28.6          |
| Automotive                        | 34.6                                    | 34.8          | 34.0         | -0.5                       | 2.0          | 308.02                               | 306.81        | 8.28                          | 8.36          | 37.2                       | 36.7          |
| Eating and Drinking               | 108.1                                   | 111.6         | 106.1        | -3.1                       | 1.9          | 106.93                               | 106.02        | 4.55                          | 4.57          | 23.5                       | 23.2          |
| Wholesale                         | 112.3                                   | 113.1         | 112.2        | -0.7                       | 0.1          | 379.78                               | 375.12        | 9.89                          | 9.82          | 38.4                       | 38.2          |
| F.I.R.E.                          | 99.4                                    | 99.4          | 97.9         | 0                          | 1.6          |                                      |               |                               |               |                            |               |
| Finance                           | 47.9                                    | 47.7          | 45.7         | 0.2                        | 4.7          |                                      |               |                               |               |                            |               |
| Insurance                         | 35.5                                    | 35.4          | 35.5         | 0.5                        | 0            |                                      |               |                               |               |                            |               |
| Real Estate                       | 16.0                                    | 16.3          | 16.6         | -1.8                       | -3.5         |                                      |               |                               |               |                            |               |
| Service Industries                | 395.6                                   | 395.3         | 383.4        | 0.1                        | 3.2          |                                      |               |                               |               |                            |               |
| Hotel and Lodging                 | 20.5                                    | 21.9          | 19.9         | -6.4                       | 2.6          |                                      |               |                               |               |                            |               |
| Business Services                 | 60.2                                    | 59.6          | 57.9         | 0.9                        | 4.0          |                                      |               |                               |               |                            |               |
| Health Services                   | 135.6                                   | 136.1         | 133.1        | -0.3                       | 1.9          |                                      |               |                               |               |                            |               |
| Private Education                 | 24.5                                    | 21.5          | 24.3         | 14.0                       | 1.0          |                                      |               |                               |               |                            |               |
| Soc. Serv., Museums etc.          | 84.4                                    | 84.1          | 81.3         | 0.4                        | 3.9          |                                      |               |                               |               |                            |               |
| Government                        | 287.0                                   | 271.6         | 289.8        | 5.7                        | -0.9         |                                      |               |                               |               |                            |               |
| Federal                           | 29.8                                    | 30.0          | 30.2         | -0.5                       | -1.3         |                                      |               |                               |               |                            |               |
| State                             | 74.4                                    | 68.2          | 74.1         | 9.1                        | 0.3          |                                      |               |                               |               |                            |               |
| Local                             | 182.8                                   | 173.4         | 185.4        | 5.4                        | -1.4         |                                      |               |                               |               |                            |               |

<sup>1/</sup> Totals may not add because of rounding.

<sup>2/</sup> Includes Scientific Instruments and Miscellaneous Industries.



# Labor Market Conditions

## Labor Force Data: State, SMSAs, and Counties

| Area or County                             | October 1983 Prelim.         |        |             | Area or County                 | October 1983 Prelim.         |        |             |
|--------------------------------------------|------------------------------|--------|-------------|--------------------------------|------------------------------|--------|-------------|
|                                            | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |                                | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |
| <b>State of Minnesota</b>                  | 2228033                      | 141709 | 6.4         | <b>Lake</b>                    | 4480                         | 1397   | 31.2        |
| <b>Metropolitan Areas</b>                  |                              |        |             | <b>Lake of the Woods</b>       | 1888                         | 144    | 7.6         |
| Duluth/Superior<br>(Duluth City Only)      | 35508                        | 3324   | 9.4         | <b>Le Sueur</b>                | 11851                        | 921    | 7.8         |
| Fargo/Moorhead<br>(Clay County, MN Only)   | 28642                        | 1085   | 3.8         | <b>Lincoln</b>                 | 3967                         | 147    | 3.7         |
| Minneapolis/St. Paul SMSA <sup>2/</sup>    | 1209446                      | 65488  | 5.4         | <b>Lyon</b>                    | 15511                        | 715    | 4.6         |
| Rochester SMSA <sup>3/</sup> (Olmsted Co.) | 61650                        | 2830   | 4.6         | <b>McLeod</b>                  | 18861                        | 1008   | 5.3         |
| St. Cloud SMSA <sup>3/</sup>               | 80145                        | 5405   | 6.7         | <b>Mahnomen</b>                | 2955                         | 262    | 8.9         |
|                                            |                              |        |             | <b>Marshall</b>                | 6561                         | 535    | 8.2         |
|                                            |                              |        |             | <b>Martin</b>                  | 13742                        | 689    | 5.0         |
|                                            |                              |        |             | <b>Meeker</b>                  | 11494                        | 802    | 7.0         |
| <b>Counties</b>                            |                              |        |             | <b>Mille Lacs</b>              | 9135                         | 742    | 8.1         |
| Aitkin                                     | 5630                         | 742    | 13.2        | <b>Morrison</b>                | 12871                        | 1104   | 8.6         |
| Anoka                                      | 114726                       | 6430   | 5.6         | <b>Mower</b>                   | 18531                        | 1193   | 6.4         |
| Becker                                     | 12754                        | 1210   | 9.5         | <b>Murray</b>                  | 6421                         | 375    | 5.8         |
| Beltrami                                   | 16668                        | 1176   | 7.1         | <b>Nicollet</b>                | 15041                        | 662    | 4.4         |
| Benton                                     | 12443                        | 912    | 7.3         | <b>Nobles</b>                  | 12334                        | 631    | 5.1         |
| Big Stone                                  | 4050                         | 218    | 5.4         | <b>Norman</b>                  | 4790                         | 183    | 3.8         |
| Blue Earth                                 | 29468                        | 1534   | 5.2         | <b>Olmsted</b>                 | 61650                        | 2830   | 4.6         |
| Brown                                      | 15918                        | 957    | 6.0         | <b>Otter Tail</b>              | 25407                        | 1637   | 6.4         |
| Carlton                                    | 12246                        | 1171   | 9.6         | <b>Pennington</b>              | 6573                         | 423    | 6.4         |
| Carver                                     | 21342                        | 873    | 4.1         |                                |                              |        |             |
| Cass                                       | 10955                        | 991    | 9.0         | <b>Pine</b>                    | 9890                         | 876    | 8.9         |
| Chippewa                                   | 7335                         | 434    | 5.9         | <b>Pipestone</b>               | 5956                         | 350    | 5.9         |
| Chisago                                    | 14991                        | 781    | 5.2         | <b>Polk</b>                    | 15927                        | 749    | 4.7         |
| Clay                                       | 28642                        | 1085   | 3.8         | <b>Pope</b>                    | 5826                         | 377    | 6.5         |
| Clearwater                                 | 4097                         | 487    | 11.9        | <b>Ramsey</b>                  | 269300                       | 15254  | 5.7         |
| Cook                                       | 2370                         | 242    | 10.2        | <b>Red Lake</b>                | 2212                         | 238    | 10.8        |
| Cottonwood                                 | 7585                         | 339    | 4.5         | <b>Redwood</b>                 | 11002                        | 468    | 4.3         |
| Crow Wing                                  | 17551                        | 1572   | 9.0         | <b>Renville</b>                | 12413                        | 684    | 5.5         |
| Dakota                                     | 113294                       | 6041   | 5.3         | <b>Rice</b>                    | 24415                        | 1680   | 6.9         |
| Dodge                                      | 8706                         | 540    | 6.2         | <b>Rock</b>                    | 5973                         | 285    | 4.8         |
| Douglas                                    | 14012                        | 886    | 6.3         | <b>Roseau</b>                  | 5935                         | 638    | 10.7        |
| Faribault                                  | 10981                        | 540    | 4.9         | <b>St. Louis (Inc. Duluth)</b> | 92970                        | 15908  | 17.1        |
| Fillmore                                   | 12657                        | 677    | 5.3         | <b>Scott</b>                   | 25508                        | 1316   | 5.2         |
| Freeborn                                   | 18467                        | 1264   | 6.8         | <b>Sherburne</b>               | 14746                        | 1054   | 7.1         |
| Goodhue                                    | 20550                        | 1298   | 6.3         | <b>Sibley</b>                  | 8830                         | 523    | 5.9         |
| Grant                                      | 3647                         | 166    | 4.6         | <b>Stearns</b>                 | 52956                        | 3439   | 6.5         |
| Hennepin                                   | 549746                       | 29584  | 5.4         | <b>Steele</b>                  | 16986                        | 1027   | 6.0         |
| Houston                                    | 10638                        | 521    | 4.9         | <b>Stevens</b>                 | 6059                         | 223    | 3.7         |
| Hubbard                                    | 5800                         | 561    | 9.7         | <b>Swift</b>                   | 6493                         | 399    | 6.1         |
| Isanti                                     | 10574                        | 804    | 7.6         | <b>Todd</b>                    | 12120                        | 730    | 6.0         |
| Itasca                                     | 18356                        | 2409   | 13.1        | <b>Traverse</b>                | 2979                         | 149    | 5.0         |
| Jackson                                    | 8279                         | 362    | 4.4         | <b>Wabasha</b>                 | 10095                        | 686    | 6.8         |
| Kanabec                                    | 5629                         | 492    | 8.7         | <b>Wadena</b>                  | 5742                         | 466    | 8.1         |
| Kandiyohi                                  | 19148                        | 1015   | 5.3         | <b>Waseca</b>                  | 9396                         | 543    | 5.8         |
| Kittson                                    | 3466                         | 211    | 6.1         | <b>Washington</b>              | 66118                        | 3366   | 5.1         |
| Koochiching                                | 7690                         | 730    | 9.5         | <b>Watsonwan</b>               | 7172                         | 451    | 6.3         |
| Lac qui Parle                              | 6002                         | 291    | 4.8         | <b>Wilkin</b>                  | 4510                         | 206    | 4.6         |
|                                            |                              |        |             | <b>Winona</b>                  | 23757                        | 1516   | 6.4         |
|                                            |                              |        |             | <b>Wright</b>                  | 34421                        | 1843   | 5.4         |
|                                            |                              |        |             | <b>Yellow Medicine</b>         | 7850                         | 319    | 4.1         |

### Technical Notes:

1/ Labor force data is computed according to BLS methodology. The method includes an adjustment to assure that the sum of the substate areas equals the separately estimated State total. This adjustment is Applied to all county and SMSA areas. County and area unemployment was multiplied by an adjustment factor of 1.71; employment was multiplied by 1.05. For a more detailed explanation see the Review of Labor and Economic Conditions, Vol. 4, No. 4, (February 1978 issue), p. 29.

2/ Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright Counties.

3/ Benton, Sherburne, and Stearns Counties.

# Income & Purchasing Power

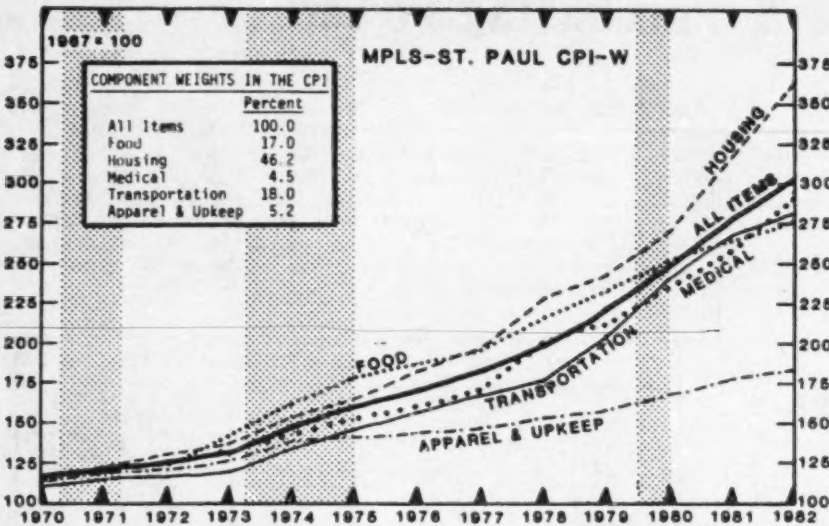
This section describes how Minnesotans fare with respect to their ability to acquire goods and services needed to meet their needs and wants and how they compare with others in the United States in this respect. Real Per Capita Personal Income measures money income received by all individuals from wages and salaries, dividends, rent, professional and farm income, personal interest payments, and transfer payments, less personal contributions for social security, all adjusted for the price level as indicated by the CPI

and for population. The Consumer Price Index (CPI) measures changes in the price of a representative combination of goods and services consumed by urban wage and salary workers relative to 1967. The inverse of the CPI (1/CPI) indicates the value of the dollar; when the CPI increases the value of the dollar falls. The change in the CPI over any period of time divided by the value at the beginning of the period gives the percentage change, or the rate of inflation.

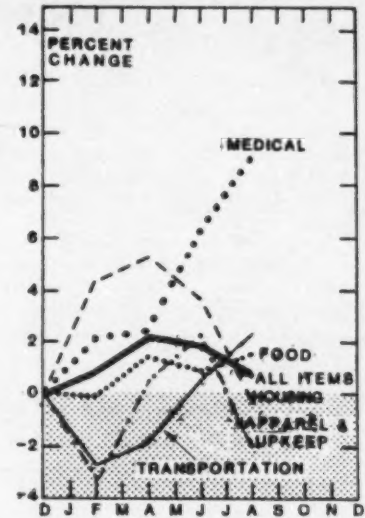
| Income And Purchasing Power                   | MINNESOTA        |                        |          | UNITED STATES    |                        |          |
|-----------------------------------------------|------------------|------------------------|----------|------------------|------------------------|----------|
|                                               | III Qtr.<br>1983 | Percent Change<br>from |          | III Qtr.<br>1983 | Percent Change<br>from |          |
|                                               |                  | Last Qtr.              | Year Ago |                  | Last Qtr.              | Year Ago |
| <u>INCOME STATISTICS</u>                      |                  |                        |          |                  |                        |          |
| Personal Income 1/*                           |                  |                        |          |                  |                        |          |
| Total Personal Income (in Billions)           | 49.9             | 2.9                    | 5.1      | 2761.4           | 1.8                    | 6.6      |
| Due to Labor 2/                               | n.a              | n.a                    | n.a      | 1857.8           | 82.2                   | 70.4     |
| Due to Property 3/                            | n.a              | n.a                    | n.a      | 621.2            | 26.8                   | 20.9     |
| Due to Transfer Payments 4/                   | n.a              | n.a                    | n.a      | 402.9            | -5.2                   | 13.2     |
| Total Disposable Personal Income              | n.a              | n.a                    | n.a      | 2361.5           | 2.6                    | 7.8      |
| As Percent of Total Pers. Inc.                | n.a              | n.a                    | n.a      | 85.5             | 0.8                    | 1.1      |
| Per Capita Personal Income 5/                 |                  |                        |          |                  |                        |          |
| Current dollar Value                          | 11972            | 2.8                    | 4.3      | 11778            | 1.5                    | 5.6      |
| Real (1967) Dollar Value                      | 3865             | 3.6                    | 4.7      | 3932             | 0.4                    | 3.0      |
| Real Median Family Money Income 5/*           |                  |                        |          |                  |                        |          |
| All Families                                  | 8937             | 3.3                    | 4.4      | 8765             | 0.3                    | 2.7      |
| Four Person Families                          | 9271             | 3.0                    | 4.2      | 10218            | 0.3                    | 2.8      |
| Earnings of Production Workers in Mfg. 6/     |                  |                        |          |                  |                        |          |
| Average Weekly Earnings                       | 379.77           | 1.9                    | 7.4      | 356.80           | 1.5                    | 7.2      |
| Real Average Weekly Earnings 7/               | 122.59           | 2.7                    | 7.8      | 119.13           | 0.4                    | 4.6      |
| Income Related Criteria 8/                    |                  |                        |          |                  |                        |          |
| Standard Budgets                              |                  |                        |          |                  |                        |          |
| Low                                           |                  |                        |          |                  |                        |          |
| Moderate                                      |                  |                        |          |                  |                        |          |
| High                                          |                  |                        |          |                  |                        |          |
| Poverty Level Income                          |                  |                        |          |                  |                        |          |
| Urban Family of Four                          | 9300             | ---                    | 10.1     | 9300             | ---                    | 10.1     |
| Nonurban Family of Four                       | 7910             | ---                    | 10.0     | 7910             | ---                    | 10.0     |
| <u>MEASURES OF PRICE CHANGE AND INFLATION</u> |                  |                        |          |                  |                        |          |
| Consumer Price Level (CPI) 9/                 | 309.8            | -0.7                   | -0.3     | 299.5            | 1.1                    | 2.5      |
| Food                                          | 295.7            | 0.2                    | 2.1      | 292.3            | 0.0                    | 1.5      |
| Housing                                       | 356.4            | -3.6                   | -4.6     | 324.2            | 0.9                    | 1.3      |
| Transportation                                | 288.2            | 2.9                    | 1.7      | 303.8            | 2.3                    | 2.1      |
| Medical                                       | 331.4            | 4.8                    | 12.3     | 357.6            | 1.5                    | 8.0      |
| Purchasing Power of the Dollar (1/CPI)        | .32              | 0.9                    | 0.3      | .33              | -1.2                   | -2.3     |
| Wholesale Price Index                         | n.a              | n.a                    | n.a      | 304.5            | 1.0                    | 1.5      |
| Industrial Commodities                        | n.a              | n.a                    | n.a      | 317.1            | 1.1                    | 1.3      |

# Income & Purchasing Power

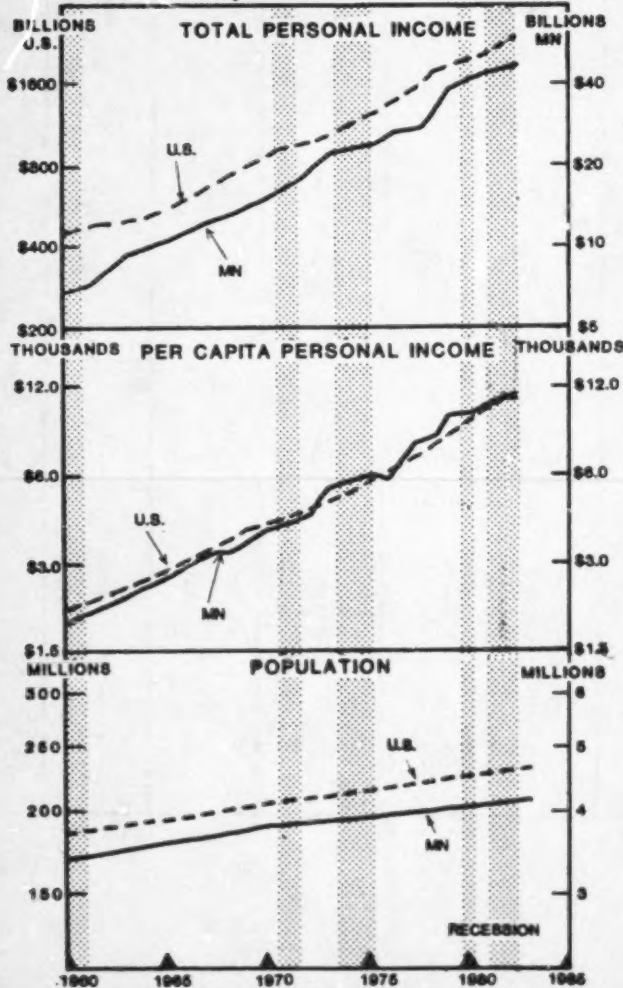
## Consumer Price Index- Major Components



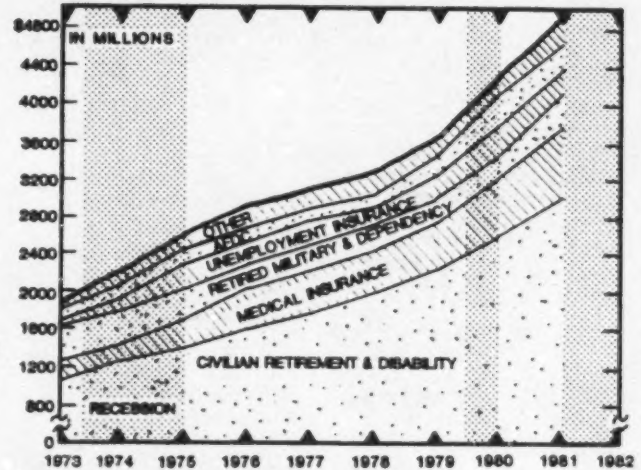
%  $\Delta$  From Dec. 1982



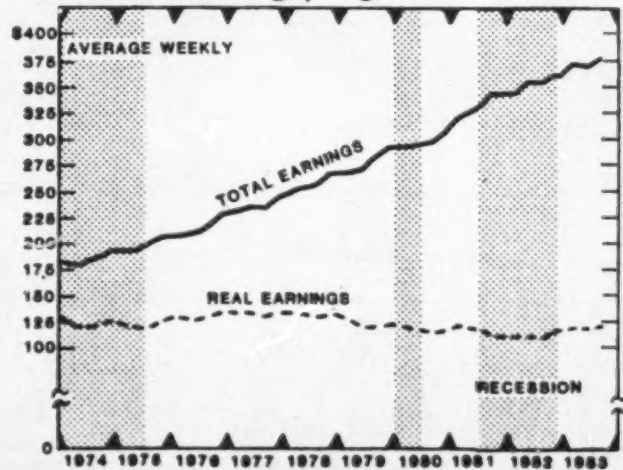
## U.S. & MN Personal Income And Population



## Government Transfer Payments To Individuals In Minnesota



## Minnesota Earnings, Mfg.





# Output, Expenditures, Money, & Credit Conditions

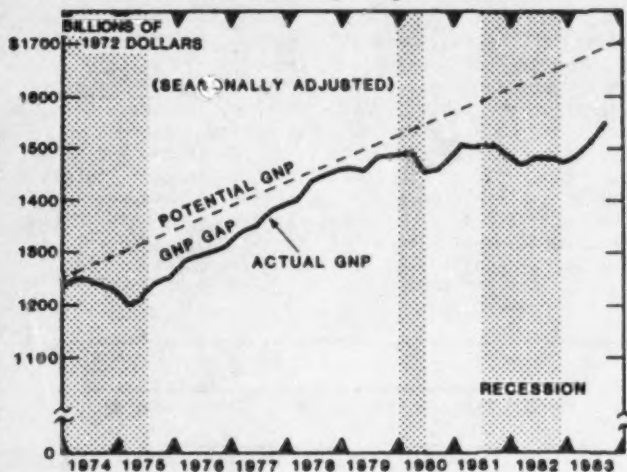
The overall level and composition of National Output shape labor market conditions, and nominal and real earnings. (Nominal values are not adjusted for inflation; real values are adjusted for inflation.) Personal Consumption Expenditures, especially on Durable Goods, together with data on Retail Sales, are frequently used as indicators of future levels of employment. The number of Building Permits influences the level of employment in construction and related industries. The Federal Budget Deficit is a key indicator of the stimulatory effect of government policy. Whether this effect results in inflation, improved employment conditions, or some combination

of the two, depends in part, upon the degree to which present productive capacity is utilized. Present and anticipated Money and Credit Conditions determine the ability of consumers, business, and State and Local governments to borrow in order to finance purchases, which, in turn, generate income and employment. Unfortunately, most data of this kind is available only for the Nation. However, in an economy as interdependent as ours, analysis of the directions of change of key national indicators is a useful tool for understanding the course of the State economy.

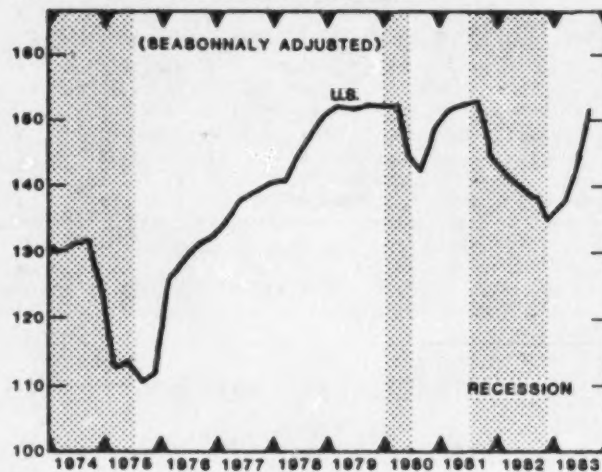
| Output, Expenditure, Money,<br>And Credit Conditions                   | MINNESOTA        |                        |          | UNITED STATES    |                        |          |
|------------------------------------------------------------------------|------------------|------------------------|----------|------------------|------------------------|----------|
|                                                                        | III Qtr.<br>1983 | Percent Change<br>from |          | III Qtr.<br>1983 | Percent Change<br>from |          |
|                                                                        |                  | Last Qtr.              | Year Ago |                  | Last Qtr.              | Year Ago |
| OUTPUT AND EXPENDITURE                                                 |                  |                        |          |                  |                        |          |
| Retail Sales (in millions of dollars)                                  | 1845             | 0.7                    | 12.0     | 98985            | 1.3                    | 10.6     |
| Private Housing Units Authorized by<br>Building Permits <sup>1/</sup>  | 23736            | -17.2                  | -44.3    | 1647             | 0.2                    | 63.6     |
| Index of Industrial Production <sup>2/</sup>                           | n.a              | n.a                    | n.a      | 151.6            | 4.9                    | 9.7      |
| Gross National Product (in billions of <sup>3/</sup><br>1972 dollars)* | n.a              | n.a                    | n.a      | 1544.4           | 1.9                    | 4.6      |
| Personal Consumption Expenditures                                      | n.a              | n.a                    | n.a      | 1019.2           | 0.9                    | 5.0      |
| Durable Goods                                                          | n.a              | n.a                    | n.a      | 158.6            | 1.3                    | 14.8     |
| As Percent of Pers. Cons.                                              | n.a              | n.a                    | n.a      | 15.6             | 0.6                    | 9.9      |
| Nondurable Goods                                                       | n.a              | n.a                    | n.a      | 379.5            | 1.3                    | 4.1      |
| Services                                                               | n.a              | n.a                    | n.a      | 481.1            | 0.4                    | 2.8      |
| Gross Private Domestic Investment                                      | n.a              | n.a                    | n.a      | 230.4            | 9.6                    | 16.1     |
| As Percent of GNP                                                      | n.a              | n.a                    | n.a      | 14.8             | 7.2                    | 10.4     |
| Nonresidential, Fixed                                                  | n.a              | n.a                    | n.a      | 168.7            | 3.5                    | 3.3      |
| Residential                                                            | n.a              | n.a                    | n.a      | 56.9             | 8.2                    | 55.9     |
| Net Exports                                                            | n.a              | n.a                    | n.a      | 8.7              | -29.3                  | -63.8    |
| Government Purchases                                                   | n.a              | n.a                    | n.a      | 296.1            | 1.4                    | 1.3      |
| Federal                                                                | n.a              | n.a                    | n.a      | 119.6            | 1.7                    | 2.3      |
| State and Local                                                        | n.a              | n.a                    | n.a      | 176.6            | 1.2                    | 0.7      |
| GNP Gap (Full Empl. Minus Present GNP)<br>1972 Dollars (in billions)   | n.a              | n.a                    | n.a      | 141.6            | -10.6                  | -12.0    |
| Current Dollars (in billions)                                          | n.a              | n.a                    | n.a      | 306.3            | -9.9                   | -8.5     |
| Current Federal Budget Deficit <sup>4/</sup><br>As Percent of GNP      | n.a              | n.a                    | n.a      | -5.6             | -5.1                   | -5.1     |
| Inventory to Sales: Durable Goods in Mfg.                              | n.a              | n.a                    | n.a      | 1.95             | -4.9                   | -16.7    |
| New Orders to Shipments: Durable Goods                                 | n.a              | n.a                    | n.a      | 1.02             | -1.5                   | 7.4      |
| Plant Capacity Utilization Rate in Mfg. <sup>5/</sup>                  | n.a              | n.a                    | n.a      | 77.3             | 4.7                    | 8.9      |
| MONEY AND CREDIT CONDITIONS                                            |                  |                        |          |                  |                        |          |
| Interest Rates                                                         |                  |                        |          |                  |                        |          |
| Discount Rate                                                          | 8.50             | 0.0                    | -21.5    | 8.50             | 0.0                    | -21.5    |
| Prime Rate                                                             | n.a              | n.a                    | n.a      | 10.80            | 2.9                    | -26.6    |
| Rate on Conventional Mortgages                                         | 12.28            | -3.5                   | -14.2    | 12.70            | -0.2                   | -18.0    |
| Federal Funds Rate                                                     | n.a              | n.a                    | n.a      | 9.46             | 7.5                    | -14.1    |
| Consumer Installment Credit Outstanding                                | n.a              | n.a                    | n.a      | 363095           | 4.2                    | 8.3      |
| As Percent of Disposable<br>Personal Income                            | n.a              | n.a                    | n.a      | 15.4             | 1.6                    | 0.5      |

# Output, Expenditures, Money, & Credit Conditions

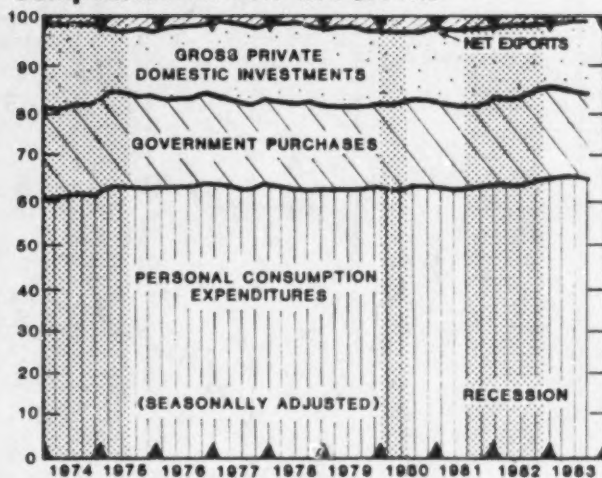
## Potential & Seasonally Adjusted GNP



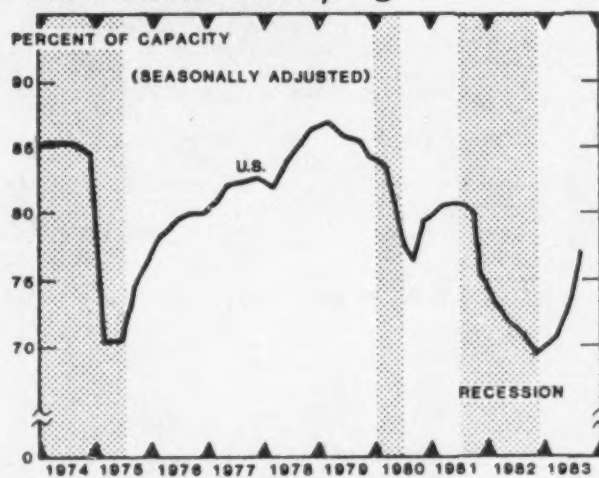
## Index of Industrial Production



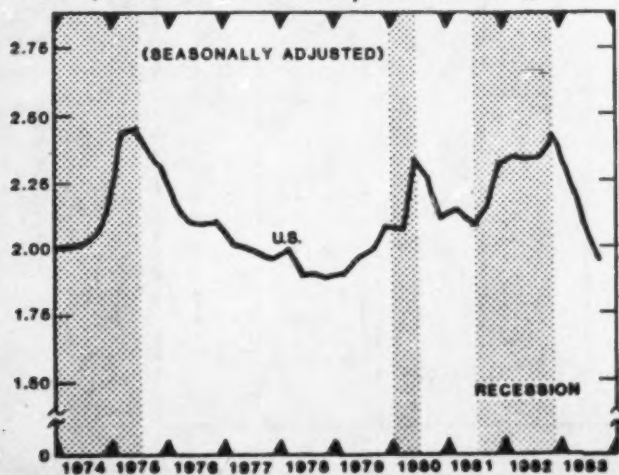
## Composition of GNP in Percent



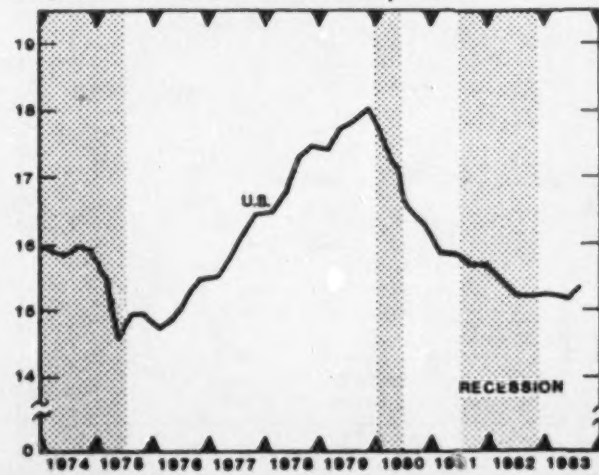
## Plant Utilization Rates, Mfg.



## Ratio, Inventory to Sales, Durable Mfg.



## Ratio, Consumer Installment Debt to Disposable Personal Income, U.S.



## Technical Notes

For the reader's convenience the notes which follow are organized in sequence for the pages which appear in the statistical section. Each note corresponds to the footnote or reference notation for the given page.

\* Wherever an asterick appears the data is seasonally adjusted.

### Page S-2

- 1/ Four percent is a generally agreed upon criteria for measuring full employment. It allows for the movement of persons between jobs. Labor Force Unemployment Rate less four percent, based on official estimates.
- 2/ Estimated worker hours expended in nonfarm payroll employment as a percent of potential worker hours assuming that each member of the nonfarm labor payroll labor force was employed at a standard rate of 40 hours per week.

### Page S-3

- 1/ The handbook unemployment rate is the estimate of unemployment prior to the Current Population Survey (CPS) adjustment.

### Page S-7

- 1/ In billions of dollars at an annual rate.
- 2/ The contribution to total Personal Income of wages, salaries, and other labor income. Percent change entry in Labor Income Impact is the percent that the change in labor income comprises of the change in total Personal Income. This is not available for Minnesota on a quarterly basis.
- 3/ The figure for the quarter is the contribution to total Personal Income of proprietor's rental, dividend, and interest income. The percent change entry in Property Income Impact is analogous to the Labor Income Impact described in 2/ above.
- 4/ The contribution to total Personal Income of transfer payments (unemployment compensation, AFDC, etc.) The percent change entry is analogous to the Labor Income Impact in 2/ above.
- 5/ In dollars at an annual rate.
- 6/ In dollars per week.
- 7/ Real average weekly earnings are the average weekly earnings of production workers in manufacturing divided by the CPI.
- 8/ Annual data.
- 9/ Value is CPI-W (Urban Wage earners and clerical workers).

### Page S-9

- 1/ U.S. data annualized in thousands. Source: Bureau of the Census.
- 2/ Base Year is 1967. Source: Federal Reserve Board.
- 3/ Totals may not add due to rounding.
- 4/ Values shown in percent change columns are deficit as percent of GNP for period cited.
- 5/ Source: Federal Reserve Board.



## Available Publications

Employment, Hours, and Earnings, January 1970-February 1983, Minneapolis-St. Paul Area (April 1983)

1980 Occupational Employment Statistics in Minnesota (May 1982)

1981 Occupational Employment Statistics in Minnesota (November 1982)

Important Minnesota Occupations by Industry (January 1983)

Minnesota Employment Outlook to 1985 (January 1981)

Review of Labor and Economic Conditions and its Monthly Supplement (Recent Issues)

Unemployment Compensation Program Statistics: Total Wages, Taxable Wages, Contributions Due, and Benefits Paid, 1950-1978 (April 1980)

Minnesota Employment and Wage data by County (Fourth Quarter 1982) Limited number available for 1975-1981

Average Covered Employment & Wages by Economic Region for the Calendar Year 1982 by two Digits of Industry (also available for 1976-1981)

Minnesota Labor Market Information Directory (April 1982)

1983 Minnesota Salary Survey by Area (September 1983)

1983 Minnesota Hospitals and Nursing Homes Salary Survey (September 1983)

1983 Minnesota Wage Data by Industry and Size of Firm (September 1983)

Labor Market Information Summary for 1983 for Minneapolis-St. Paul SMSA (August 1983), St. Cloud SMSA (August 1983), Duluth-Superior (October 1983), and Minnesota (September 1983)

Cyclical Sensitivity in Minnesota (August 1981)

These publications are available upon request while supply lasts.

Write to: Director, Research and Statistical Services Office  
Minnesota Department of Economic Security  
390 North Robert Street  
St. Paul, Minnesota 55101

# CURRENT MINNESOTA LABOR MARKET CONDITIONS

October, 1983 Supplement to The Review of Labor and Economic Conditions

Prepared by the Research and Statistical Services Office, MN Dept. of Economic Security, 390 N. Robert St., St. Paul MN 55101, in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics, and Employment and Training Admin.

## Nation

The Nation's economy accelerated in September as nearly all of the major economic indicators displayed more strength than in August. It now appears that the recovery is still stronger than was expected and that the economy will grow faster in the fourth quarter than was predicted earlier.

The employment picture was brightened by a drop in unemployment and by gains in both total and nonfarm payroll employment. The seasonally adjusted unemployment rate fell 0.2 of a percentage point to 9.3 percent in September after holding at 9.5 percent in July and August. Economists had not expected that the rate would drop this far by the ninth month of the recovery. Also, total employment (seasonally adjusted) rose by 382,000 in September and has grown by 2.9 million since the recession low in December. Meanwhile, seasonally adjusted nonfarm payroll employment jumped by 733,000 in September as nearly 700,000 striking workers returned to work. Most of the non-strike related growth in September was in the more cyclically sensitive construction and manufacturing industries.

Other sectors of the economy also showed more strength than in earlier months. The third quarter growth in real Gross National Product which was reported at 7.0 percent in the "flash" estimate was revised upward to 7.9 percent in the latest release. Also, retail sales, industrial production and personal income were stronger than in August. However, housing starts fell rather steeply in September, apparently reflecting the rise in interest rates during the summer.

## State

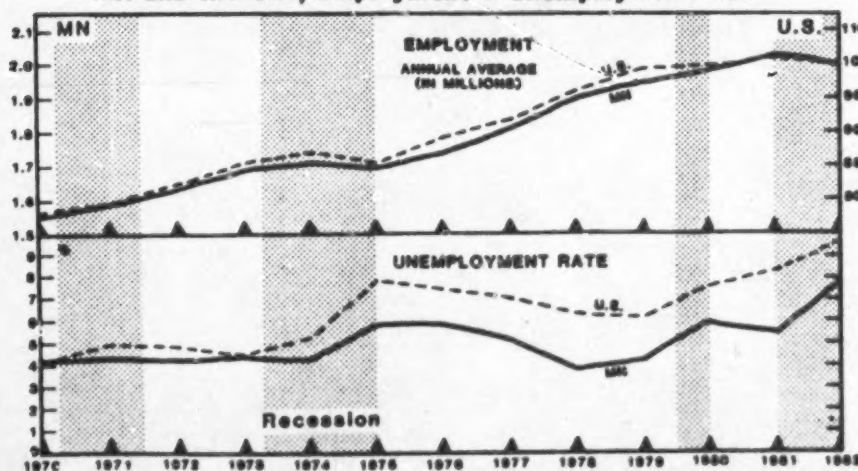
The Minnesota economy gave out mixed signals in September. Although the September unemployment rate dropped sharply compared to past years, and total employment rose at a considerably steeper rate than normal in September, seasonally adjusted nonfarm payroll employment showed little strength in September.

Minnesota's seasonally unadjusted unemployment rate fell by a strong 0.7 of a percentage point to 6.5 percent in September. The average August to September change in the rate is a decline of 0.2 percentage points. Also, total employment, which normally would drop by 0.3 percent between August and September, rose by 0.6 percent this September. Moreover, the over-the-year gain in total employment was a healthy 2.7 percent, the largest since October 1981. On the other hand, seasonally adjusted nonfarm payroll employment would have risen by only about 500 if the workers on strike had not returned to work. Employment in mining and construction (seasonally adjusted) declined in September, while durable goods manufacturing employment, also seasonally adjusted, showed no change in September.

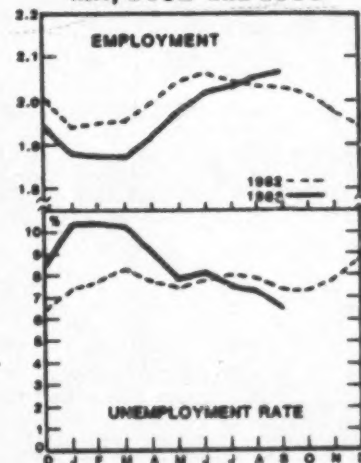
The available leading indicators also showed somewhat differing trends. While the seasonally adjusted average workweek in manufacturing has been edging upward since April, data for July and August indicate that permits for private housing (also seasonally adjusted) will be lower in the third quarter than in the first half of the year.

| Labor Force Estimates | MINNESOTA<br>(Numbers in '000's) |          |                  | UNITED STATES<br>(Numbers in '000,000's) |          |                  |
|-----------------------|----------------------------------|----------|------------------|------------------------------------------|----------|------------------|
|                       | September<br>1983                | Change   |                  | September<br>1983                        | Change   |                  |
|                       |                                  | Last Mo. | From<br>Year Ago |                                          | Last Mo. | From<br>Year Ago |
| Civilian Labor Force  | 2219.2                           | -3.4     | 39.7             | 112.2                                    | -1.4     | 1.6              |
| Employed              | 2074.2                           | 12.2     | 54.2             | 102.4                                    | -0.8     | 2.5              |
| Unemployed            | 145.0                            | -15.6    | -14.5            | 9.8                                      | -0.6     | -0.9             |
| Unemployment Rate     |                                  |          |                  |                                          |          |                  |
| Actual                | 6.5                              | -0.7     | -0.8             | 8.8                                      | -0.4     | -0.9             |
| Seasonally Adjusted   | n.a                              | n.a      | n.a              | 9.3                                      | -0.2     | -0.9             |

MN and the U.S., Employment & Unemployment Rate



MN, 1982 and 1983



# Minnesota Nonagricultural Wage & Salary Employment, Hours, and Earnings

| INDUSTRY                          | EMPLOYMENT <sup>1/</sup><br>(thousands) |              |               | PER CENT<br>CHANGE<br>FROM |               | PRODUCTION WORKERS' HOURS & EARNINGS |              |                               |              |                            |              |
|-----------------------------------|-----------------------------------------|--------------|---------------|----------------------------|---------------|--------------------------------------|--------------|-------------------------------|--------------|----------------------------|--------------|
|                                   |                                         |              |               |                            |               | Average<br>Weekly<br>Earnings        |              | Average<br>Hourly<br>Earnings |              | Average<br>Weekly<br>Hours |              |
|                                   | Sept.<br>1983                           | Aug.<br>1983 | Sept.<br>1982 | Aug.<br>1983               | Sept.<br>1982 | Sept.<br>1983                        | Aug.<br>1983 | Sept.<br>1983                 | Aug.<br>1983 | Sept.<br>1983              | Aug.<br>1983 |
| TOTAL NONAGRICULTURAL             | 1733.0                                  | 1711.2       | 1716.1        | 1.3                        | 1.0           |                                      |              |                               |              |                            |              |
| MANUFACTURING                     | 350.8                                   | 349.0        | 351.1         | 0.5                        | -0.1          | 384.06                               | 379.45       | 9.53                          | 9.51         | 40.3                       | 39.9         |
| Durable Goods                     | 203.0                                   | 203.0        | 203.8         | 0                          | -0.4          | 401.23                               | 394.71       | 9.81                          | 9.77         | 40.9                       | 40.4         |
| Furniture, Lumber and Wood        | 14.2                                    | 14.3         | 13.8          | -1.0                       | 3.1           | 440.48                               | 437.22       | 10.34                         | 10.41        | 42.6                       | 42.0         |
| Stone, Clay and Glass             | 8.5                                     | 8.5          | 8.8           | 0.6                        | -3.3          | 374.61                               | 374.61       | 9.73                          | 9.73         | 38.5                       | 38.5         |
| Primary Metals                    | 4.9                                     | 5.0          | 5.2           | -0.4                       | -5.3          | 369.34                               | 358.11       | 8.67                          | 8.65         | 42.6                       | 41.4         |
| Fabricated Metals                 | 33.1                                    | 33.1         | 33.1          | 0.2                        | 0.1           | 457.47                               | 437.89       | 11.05                         | 10.92        | 41.4                       | 40.1         |
| Nonelectrical Machinery           | 78.8                                    | 78.4         | 78.5          | 0.5                        | 0.4           | 403.74                               | 398.34       | 9.92                          | 9.86         | 40.7                       | 40.4         |
| Electrical Machinery              | 25.9                                    | 26.1         | 26.0          | -0.4                       | -0.2          | 348.84                               | 346.76       | 8.55                          | 8.52         | 40.8                       | 40.7         |
| Transportation Equipment          | 5.9                                     | 6.0          | 6.0           | -0.8                       | -0.6          | 439.02                               | 445.59       | 10.63                         | 10.66        | 41.3                       | 41.8         |
| Other Durable Goods <sup>2/</sup> | 31.5                                    | 31.7         | 32.4          | -0.4                       | -2.7          | 367.72                               | 364.57       | 9.17                          | 9.16         | 40.1                       | 39.8         |
| Nondurable Goods                  | 147.9                                   | 146.0        | 147.3         | 1.2                        | 0.4           | 363.53                               | 360.25       | 9.18                          | 9.19         | 39.6                       | 39.2         |
| Food and Kindred                  | 53.7                                    | 52.3         | 54.3          | 2.6                        | -1.0          | 317.58                               | 315.22       | 7.90                          | 7.92         | 40.2                       | 39.8         |
| Textile and Apparel               | 4.8                                     | 4.8          | 4.9           | 0.1                        | -3.3          | 235.63                               | 231.34       | 6.25                          | 6.12         | 37.7                       | 37.8         |
| Paper and Allied                  | 32.6                                    | 32.7         | 32.1          | -0.4                       | 1.4           | 464.40                               | 460.75       | 10.80                         | 10.74        | 43.0                       | 42.9         |
| Printing and Publishing           | 35.5                                    | 35.2         | 35.7          | 1.1                        | -0.6          | 370.33                               | 366.48       | 10.23                         | 10.18        | 36.2                       | 36.0         |
| Chemical and Petroleum            | 9.5                                     | 9.5          | 9.3           | 0.4                        | 3.0           | 429.94                               | 425.10       | 10.94                         | 10.90        | 39.3                       | 39.0         |
| Rubber and Leather                | 11.8                                    | 11.6         | 11.0          | 1.3                        | 6.6           | 311.00                               | 307.64       | 8.12                          | 8.27         | 38.3                       | 37.2         |
| NONMANUFACTURING                  | 1382.2                                  | 1362.2       | 1365.0        | 1.5                        | 1.3           |                                      |              |                               |              |                            |              |
| Mining and Quarrying              | 7.6                                     | 9.2          | 6.8           | -17.5                      | 12.0          | 413.44                               | 423.16       | 12.16                         | 12.23        | 34.0                       | 34.6         |
| Metal Mining                      | 5.2                                     | 6.8          | 4.6           | -23.6                      | 14.0          | 417.57                               | 420.53       | 13.09                         | 13.06        | 31.9                       | 32.2         |
| Construction                      | 71.6                                    | 72.0         | 68.2          | -0.6                       | 5.0           | 543.14                               | 585.58       | 14.64                         | 14.75        | 37.1                       | 39.7         |
| Building                          | 19.1                                    | 19.0         | 18.7          | 0.3                        | 1.8           | 499.13                               | 528.92       | 13.31                         | 13.81        | 37.5                       | 38.3         |
| Highway and Heavy                 | 15.7                                    | 16.4         | 13.5          | -3.9                       | 16.3          | 520.42                               | 609.74       | 13.31                         | 13.46        | 39.1                       | 45.3         |
| Special Trades                    | 36.8                                    | 36.7         | 35.9          | 0.3                        | 2.4           | 578.16                               | 605.93       | 16.06                         | 16.03        | 36.0                       | 37.8         |
| Transportation                    | 61.4                                    | 59.1         | 61.5          | 3.8                        | -0.2          |                                      |              |                               |              |                            |              |
| Railroads                         | 13.1                                    | 13.3         | 13.3          | -1.1                       | -1.2          | 534.06                               | 534.06       | 11.61                         | 11.61        | 46.0                       | 46.0         |
| Trucking and Warehousing          | 23.8                                    | 23.4         | 23.4          | 1.5                        | 1.3           | 436.82                               | 436.30       | 11.87                         | 11.76        | 36.8                       | 37.1         |
| Public Utilities                  | 33.3                                    | 25.2         | 34.1          | 32.0                       | -2.3          | 503.42                               | 513.48       | 12.43                         | 12.71        | 40.5                       | 40.4         |
| Communications                    | 19.0                                    | 11.0         | 19.9          | 73.4                       | -4.2          | 467.78                               | 467.78       | 11.55                         | 11.55        | 40.5                       | 40.5         |
| Elec., Gas and Sanitary           | 14.3                                    | 14.2         | 14.2          | 0.2                        | 0.3           | 544.85                               | 544.19       | 13.42                         | 13.47        | 40.6                       | 40.4         |
| Trade                             | 442.3                                   | 447.0        | 437.2         | 0.3                        | 1.2           | 221.92                               | 223.69       | 7.30                          | 7.31         | 30.4                       | 30.6         |
| Retail                            | 329.6                                   | 326.7        | 323.3         | 0.9                        | 1.9           | 178.22                               | 179.14       | 6.32                          | 6.33         | 28.2                       | 28.3         |
| General Merchandise               | 44.8                                    | 43.6         | 44.2          | 2.6                        | 1.4           | 173.75                               | 174.33       | 5.91                          | 5.85         | 29.4                       | 29.8         |
| Food Stores                       | 46.7                                    | 46.7         | 46.0          | -0.1                       | 1.5           | 212.83                               | 212.43       | 7.39                          | 7.25         | 28.8                       | 29.3         |
| Automotive                        | 34.8                                    | 34.7         | 34.4          | 0.4                        | 1.2           | 282.92                               | 280.54       | 8.13                          | 7.97         | 34.8                       | 35.2         |
| Eating and Drinking               | 111.8                                   | 110.9        | 110.2         | 0.8                        | 1.4           | 99.01                                | 102.27       | 4.46                          | 4.67         | 22.2                       | 21.9         |
| Wholesale                         | 112.7                                   | 114.3        | 113.8         | -1.4                       | -1.0          | 375.67                               | 375.72       | 9.86                          | 9.81         | 38.1                       | 38.3         |
| F.I.R.E.                          | 99.0                                    | 99.3         | 98.4          | -0.4                       | 0.5           |                                      |              |                               |              |                            |              |
| Finance                           | 47.6                                    | 47.7         | 46.1          | -0.3                       | 3.3           |                                      |              |                               |              |                            |              |
| Insurance                         | 35.2                                    | 35.2         | 35.6          | -0.2                       | -1.2          |                                      |              |                               |              |                            |              |
| Real Estate                       | 16.2                                    | 16.4         | 16.8          | -1.0                       | -3.3          |                                      |              |                               |              |                            |              |
| Service Industries                | 395.7                                   | 394.3        | 384.1         | 0.4                        | 3.0           |                                      |              |                               |              |                            |              |
| Hotel and Lodging                 | 22.1                                    | 23.1         | 21.6          | -4.3                       | 2.3           |                                      |              |                               |              |                            |              |
| Business Services                 | 59.3                                    | 58.8         | 57.0          | 0.9                        | 4.1           |                                      |              |                               |              |                            |              |
| Health Services                   | 136.0                                   | 136.4        | 133.4         | -0.3                       | 2.0           |                                      |              |                               |              |                            |              |
| Private Education                 | 21.5                                    | 18.7         | 21.3          | 15.0                       | 1.1           |                                      |              |                               |              |                            |              |
| Soc. Serv., Museums etc.          | 84.4                                    | 84.5         | 81.4          | -0.1                       | 3.7           |                                      |              |                               |              |                            |              |
| Government                        | 271.4                                   | 262.1        | 274.7         | 3.5                        | -1.2          |                                      |              |                               |              |                            |              |
| Federal                           | 29.8                                    | 30.0         | 30.6          | -0.6                       | -2.6          |                                      |              |                               |              |                            |              |
| State                             | 68.5                                    | 62.6         | 67.7          | 9.4                        | 1.1           |                                      |              |                               |              |                            |              |
| Local                             | 173.1                                   | 169.5        | 176.3         | 2.1                        | -1.9          |                                      |              |                               |              |                            |              |

<sup>1/</sup> Totals may not add because of rounding.

<sup>2/</sup> Includes Scientific Instruments and Miscellaneous Industries.



# Labor Force Data: State, SMSAs, and Counties

| Area or County                             | September, 1983 Prelim.      |        |             | Area or County          | September, 1983 Prelim.      |        |             |
|--------------------------------------------|------------------------------|--------|-------------|-------------------------|------------------------------|--------|-------------|
|                                            | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |                         | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |
| <u>State of Minnesota</u>                  | 2219216                      | 145042 | 6.5         | Lake                    | 4458                         | 1380   | 31.0        |
| <u>Metropolitan Areas</u>                  |                              |        |             | Lake of the Woods       | 1986                         | 142    | 7.2         |
| Duluth/Superior                            |                              |        |             | Le Sueur                | 14047                        | 925    | 6.6         |
| (Duluth City Only)                         | 35754                        | 3720   | 10.4        | Lincoln                 | 4049                         | 150    | 3.7         |
| Fargo/Moorhead                             |                              |        |             | Lyon                    | 15493                        | 703    | 4.5         |
| (Clay County, MN Only)                     | 28010                        | 1271   | 4.5         | McLeod                  | 19180                        | 923    | 4.8         |
| Minneapolis/St. Paul SMSA <sup>2/</sup>    | 1191407                      | 66448  | 5.6         | Mahnomen                | 2986                         | 247    | 8.3         |
| Rochester SMSA <sup>3/</sup> (Olmsted Co.) | 61027                        | 2783   | 4.6         | Marshall                | 6614                         | 521    | 7.9         |
| St. Cloud SMSA <sup>3/</sup>               | 79739                        | 5915   | 7.4         | Martin                  | 14683                        | 788    | 5.4         |
|                                            |                              |        |             | Meeker                  | 11914                        | 845    | 7.1         |
| <u>Counties</u>                            |                              |        |             | Mille Lacs              | 9141                         | 688    | 7.5         |
| Aitkin                                     | 5793                         | 730    | 12.6        | Morrison                | 12995                        | 1089   | 8.4         |
| Anoka                                      | 113146                       | 6649   | 5.9         | Mower                   | 18546                        | 1197   | 6.5         |
| Becker                                     | 12931                        | 1158   | 9.0         | Murray                  | 6553                         | 343    | 5.2         |
| Beltrami                                   | 16601                        | 1124   | 6.8         | Nicollet                | 14903                        | 637    | 4.3         |
| Benton                                     | 12384                        | 995    | 8.0         | Nobles                  | 12603                        | 544    | 4.3         |
| Big Stone                                  | 4259                         | 230    | 5.4         | Norman                  | 4856                         | 210    | 4.3         |
| Blue Earth                                 | 29206                        | 1491   | 5.1         | Olmsted                 | 61027                        | 2783   | 4.6         |
| Brown                                      | 16396                        | 987    | 6.0         | Otter Tail              | 25508                        | 1650   | 6.5         |
| Carlton                                    | 12114                        | 1258   | 10.4        | Pennington              | 6572                         | 455    | 6.9         |
| Carver                                     | 21052                        | 923    | 4.4         |                         |                              |        |             |
| Cass                                       | 11036                        | 898    | 8.1         | Pine                    | 10256                        | 862    | 8.4         |
| Chippewa                                   | 7301                         | 429    | 5.9         | Pipestone               | 5895                         | 245    | 4.2         |
| Chisago                                    | 14817                        | 843    | 5.7         | Polk                    | 15760                        | 752    | 4.8         |
| Clay                                       | 28010                        | 1271   | 4.5         | Pope                    | 5891                         | 340    | 5.8         |
| Clearwater                                 | 4129                         | 482    | 11.7        | Ramsey                  | 265339                       | 15512  | 5.8         |
| Cook                                       | 2387                         | 228    | 9.6         | Red Lake                | 2293                         | 255    | 11.1        |
| Cottonwood                                 | 7543                         | 413    | 5.5         | Redwood                 | 10944                        | 485    | 4.4         |
| Crow Wing                                  | 18057                        | 1610   | 8.9         | Renville                | 12667                        | 935    | 7.4         |
| Dakota                                     | 111573                       | 6101   | 5.5         | Rice                    | 24434                        | 1605   | 6.6         |
| Dodge                                      | 8883                         | 566    | 6.4         | Rock                    | 5986                         | 227    | 3.8         |
| Douglas                                    | 14102                        | 800    | 5.7         | Roseau                  | 6028                         | 338    | 5.6         |
| Faribault                                  | 11810                        | 529    | 4.5         | St. Louis (Inc. Duluth) | 94864                        | 18162  | 19.1        |
| Fillmore                                   | 12833                        | 697    | 5.4         | Scott                   | 25065                        | 1275   | 5.1         |
| Freeborn                                   | 18448                        | 1283   | 7.0         | Sherburne               | 14520                        | 996    | 6.9         |
| Goodhue                                    | 20424                        | 1380   | 6.8         | Sibley                  | 8745                         | 435    | 5.0         |
| Grant                                      | 3681                         | 183    | 5.0         | Stearns                 | 52835                        | 3924   | 7.4         |
| Hennepin                                   | 541539                       | 30016  | 5.5         | Steele                  | 17386                        | 1155   | 6.6         |
| Houston                                    | 10627                        | 494    | 4.6         | Stevens                 | 6019                         | 210    | 3.5         |
| Hubbard                                    | 6035                         | 529    | 8.8         | Swift                   | 6678                         | 399    | 6.0         |
| Isanti                                     | 10456                        | 808    | 7.7         | Todd                    | 12457                        | 788    | 6.3         |
| Itasca                                     | 18209                        | 2112   | 11.6        | Traverse                | 3110                         | 156    | 5.0         |
| Jackson                                    | 8205                         | 419    | 5.1         | Wabasha                 | 10518                        | 693    | 6.6         |
| Kanabec                                    | 5341                         | 487    | 9.1         | Wadena                  | 5721                         | 462    | 8.1         |
| Kandiyohi                                  | 18979                        | 1052   | 5.5         | Waseca                  | 10266                        | 568    | 5.5         |
| Kittson                                    | 3537                         | 206    | 5.8         | Washington              | 65020                        | 3310   | 5.1         |
| Koochiching                                | 7635                         | 693    | 9.1         | Watsonwan               | 7151                         | 485    | 6.8         |
| Lac qui Parle                              | 6218                         | 294    | 4.7         | Wilkin                  | 4629                         | 232    | 5.0         |
|                                            |                              |        |             | Winona                  | 23115                        | 1513   | 6.5         |
|                                            |                              |        |             | Wright                  | 33856                        | 1819   | 5.4         |
|                                            |                              |        |             | Yellow Medicine         | 8007                         | 316    | 3.9         |

## Technical Notes:

<sup>1/</sup> Labor force data is computed according to BLS methodology. The method includes an adjustment to assure that the sum of the substate areas equals the separately estimated State total. This adjustment is applied to all county and SMSA areas. County and area unemployment was multiplied by an adjustment factor of 1.69; employment was multiplied by 1.04. For a more detailed explanation see the Review of Labor and Economic Conditions, Vol. 4, No. 4, (February 1978 issue), p. 29.

<sup>2/</sup> Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright Counties.

<sup>3/</sup> Benton, Sherburne, and Stearns Counties.

# Selected Minnesota Program Statistics

## Characteristics of the Insured Unemployed

Tables 1 and 2 provide data on persons who filed a claim for unemployment compensation in Minnesota during the month. Only those claiming benefits from the regular State program are represented since data on the characteristics of Federal employees and veterans are not available.

Largely as a result of a rapid increase in mining claimants, the total number of claimants for unemployment benefits did not fall as much as might be expected in September. The number of claimants dropped by 4,800 or 14.6 percent between August and September. Except for construction, the declines in other industries were steeper than normal for September. The largest over-the-month decreases were in services (2,295), manufacturing (1,443) and retail trade (1,105). Over-the year, the total number of claimants declined by 26,164 or 48 percent. A sharp drop in manufacturing claimants accounted for over 40 percent of the decrease from September 1982. Even with the sharp increase this September, mining claimants were 57 percent below last September. Sizeable over-the-year declines also took place in the construction and services industries.

Table 1. Distribution of Insured Unemployed, By Age and Sex, September, 1983

| Age Groups  | Number | Percent Distributions |            |                |
|-------------|--------|-----------------------|------------|----------------|
|             |        | Men of Totals         | Men of Men | Women of Women |
| TOTALS      | 28023  | 64.2                  | 100.0      | 100.0          |
| Under 45    | 21062  | 64.6                  | 75.6       | 74.3           |
| Under 25    | 4447   | 60.9                  | 15.0       | 17.4           |
| 25-34       | 10367  | 66.4                  | 38.3       | 34.7           |
| 35-44       | 6248   | 64.4                  | 22.3       | 22.2           |
| 45 and Over | 6961   | 63.0                  | 24.4       | 25.7           |
| 45-54       | 3897   | 62.7                  | 13.6       | 14.5           |
| 55 and Over | 3064   | 63.4                  | 10.8       | 11.2           |

Table 2. Distribution of Insured Unemployed By Industry and Occupation, September, 1983

| Industry and Occupational Attachment | Number | Percent of Total | Percent Long-Term Unemployed <sup>1/</sup> | Women as Percent of Total |
|--------------------------------------|--------|------------------|--------------------------------------------|---------------------------|
| Total, All Industries                | 28023  | 100.0            | 26.1                                       | 35.9                      |
| Ag., For., Fish.                     | 313    | 1.1              | 13.2                                       | 33.8                      |
| Mining                               | 3156   | 11.3             | 12.4                                       | 3.4                       |
| Construction                         | 2847   | 10.2             | 14.0                                       | 6.5                       |
| Manufacturing                        | 6579   | 23.5             | 27.0                                       | 36.4                      |
| Pub. Utilities                       | 1120   | 4.0              | 33.3                                       | 25.4                      |
| Wholesale Trade                      | 2070   | 7.4              | 32.5                                       | 32.5                      |
| Retail Trade                         | 3877   | 13.8             | 31.9                                       | 45.6                      |
| Fin., Ins., Real Est.                | 901    | 3.2              | 37.1                                       | 58.5                      |
| Services                             | 5809   | 20.7             | 32.2                                       | 58.8                      |
| Public Admin.                        | 597    | 2.1              | 19.8                                       | 54.5                      |
| Inf. Not Available                   | 754    | 2.7              | 2.3                                        | 37.1                      |
| Total, All Occupations               | 28023  | 100.0            | 26.1                                       | 35.9                      |
| Prof., Tech., Mgr.                   | 5126   | 18.3             | 35.3                                       | 44.7                      |
| Clerical                             | 3997   | 14.3             | 33.8                                       | 82.3                      |
| Sales                                | 1363   | 4.9              | 34.0                                       | 36.8                      |
| Services                             | 2382   | 8.5              | 29.1                                       | 53.6                      |
| Farm., For., Fish. Processing        | 229    | 0.8              | 10.9                                       | 29.5                      |
| Machine Trades                       | 960    | 3.4              | 32.3                                       | 29.1                      |
| Benchwork                            | 1766   | 6.3              | 24.9                                       | 14.6                      |
| Structural Work                      | 2079   | 7.4              | 20.1                                       | 53.4                      |
| Misc.                                | 3945   | 14.1             | 16.8                                       | 3.4                       |
| Inf. Not Available                   | 5717   | 20.4             | 17.8                                       | 11.7                      |
|                                      | 459    | 1.6              | 39.5                                       | 48.8                      |

<sup>1/</sup> Long-Term unemployed refers to unemployment insurance claimants whose current spell of unemployment has lasted 15 weeks or longer.

## Job Service Applicant Supply and Demand

Table 3 compares Job Service (J.S.) job applicants with the J.S. job openings that existed at the end of the month. These comparisons are expressed as supply/demand ratios. Other things being equal, the greater the ratio of applicants to openings, the greater the competition has been for work within that occupational category. To put these ratios into context, the reader must remember that not only do job seekers and employers in general find jobs or recruit workers through other means, but those interested in certain kinds of jobs are particularly unlikely to use the J.S. For example, workers seeking professional and Managerial jobs are least likely to use the J.S., whereas employers usually recruit construction workers through union halls and hire teachers directly. Thus, the main value of Table 3 is that it reflects, for broad occupational groups, the relative labor market conditions that those using the J.S. encountered when seeking work.

Table 3. Experienced Supply/Job Openings Demand <sup>1/</sup>

| Occupation          | Applicants (Supply)<br>Sept. 1983 | Job Openings (Demand)<br>Sept. 1983 | Supply/Demand Ratio |            |
|---------------------|-----------------------------------|-------------------------------------|---------------------|------------|
|                     |                                   |                                     | Sept. 1983          | Sept. 1982 |
| Total               | 107388                            | 11139                               | 9.6                 | 6.1        |
| Prof., Tech., Mgr.  | 14024                             | 909                                 | 15.4                | 7.3        |
| Clerical            | 19086                             | 2220                                | 8.6                 | 5.7        |
| Sales               | 5223                              | 1368                                | 3.8                 | 2.6        |
| Dom. Services       | 1754                              | 155                                 | 11.3                | 2.3        |
| Other Services      | 16149                             | 2975                                | 5.4                 | 4.1        |
| Farm., Fish., For.  | 4284                              | 281                                 | 15.2                | 6.4        |
| Processing          | 2298                              | 711                                 | 3.2                 | 2.4        |
| Machine Trades      | 6993                              | 377                                 | 18.5                | 16.8       |
| Benchwork           | 6764                              | 298                                 | 22.7                | 17.3       |
| Structural Work     | 13846                             | 491                                 | 28.2                | 10.7       |
| Mtr. Frght., Trans. | 4444                              | 619                                 | 7.2                 | 12.6       |
| Pkg. & Mat. Hndlg.  | 10590                             | 677                                 | 16.2                | 6.3        |
| Other               | 1533                              | 58                                  | 26.4                | 19.4       |

<sup>1/</sup> Inexperienced and improperly coded job applicants are not included in this table.

# CURRENT MINNESOTA LABOR MARKET CONDITIONS

December 1983 Supplement to The Review of Labor and Economic Conditions

Prepared by the Research and Statistical Services Office, MN Dept. of Economic Security, 390 N. Robert St., St. Paul MN 55101, in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics, and Employment and Training Admin.

## Nation

The national economy continued to improve in November as employment, sales and consumer spending showed a healthy increase. Also, the unemployment rate dropped sharply for the second consecutive month. However, there were some signs that the economy may slow somewhat in the future months.

Labor market conditions improved significantly again in November. The seasonally adjusted unemployment rate fell 0.4 of a percentage point to 8.4 percent in November after a decline of 0.5 of a point in October. Since the high in December 1982, the rate has fallen by 2.4 percentage points. Also, total employment (seasonally adjusted) rose by 743,000 in November following little change in October. Employment has expanded by 3.6 million since last December. Moreover, seasonally adjusted nonfarm payroll employment also increased substantially in November, rising by 370,000 after large gains in the past two months. The biggest advances in October and November were in durable goods manufacturing and services.

Developments in other indicators in November were generally favorable. Retail sales and personal consumption expenditures posted strong gains while the increases in industrial production and personal income were more moderate. Also, after two months of declines, housing starts rose modestly. However, because the gains in consumer spending have been exceeding the increases in personal income, consumer expenditures may decline in the coming months unless the personal savings rate exhibits a further decrease.

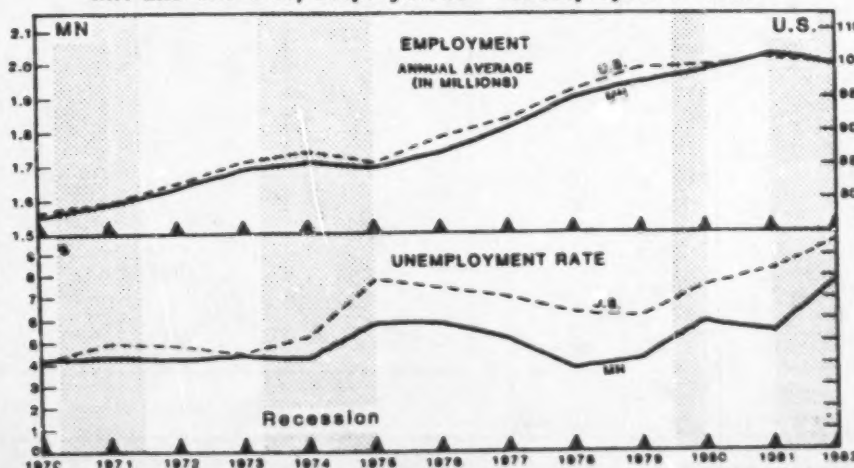
## State

The State's economy also showed further improvement in November, albeit less pronounced than in October. The unemployment rate rose somewhat less than it usually does in November while total employment did not decline nearly as steeply as it normally does at this time of the year. However, seasonally adjusted nonfarm wage and salary employment managed a small increase after a substantial gain in October.

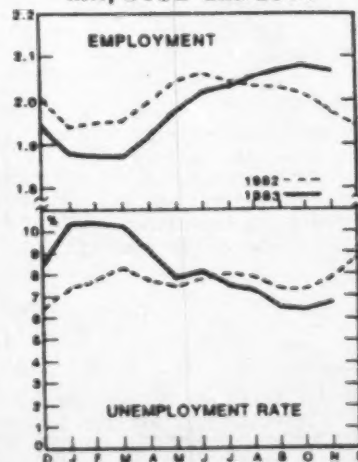
The seasonally unadjusted unemployment rate rose 0.4 of a percentage point to 6.8 percent in November after a drop of 0.2 of a percentage point in October. This compares with an average rise of 0.5 percentage points between October and November over the past thirteen years. Unadjusted total employment, which will, on average, fall 1.3 percent in November, declined by only 0.8 percent this November. While the over-the-year gain in total employment was a strong 4.9 percent, the largest since a 5.3 percent jump in September 1979, the seasonally adjusted nonfarm payroll employment rose only 1,600 in November after a surge of 12,100 in October. The sharp rise in October was the largest monthly gain since payroll employment began to climb in January. The largest employment increases through November since the low in December 1982 were in services (13,600), trade (13,200) and manufacturing (7,900). At 1,726,500, payroll employment has now climbed half way back to the pre-recession level of 1,773,900 in January 1981.

| Labor Force Estimates | MINNESOTA<br>(Numbers in '000's) |          |                  | UNITED STATES<br>(Numbers in '000,000's) |          |                  |
|-----------------------|----------------------------------|----------|------------------|------------------------------------------|----------|------------------|
|                       | November<br>1983                 | Change   |                  | November<br>1983                         | Change   |                  |
|                       |                                  | Last Mo. | From<br>Year Ago |                                          | Last Mo. | From<br>Year Ago |
| Civilian Labor Force  | 2223.2                           | -7.7     | 77.2             | 112.1                                    | 0.1      | 1.2              |
| Employed              | 2072.4                           | -16.7    | 96.8             | 103.0                                    | 0.3      | 3.6              |
| Unemployed            | 150.8                            | 9.0      | -19.6            | 9.1                                      | -0.2     | -2.4             |
| Unemployment Rate     |                                  |          |                  |                                          |          |                  |
| Actual                | 6.8                              | 0.4      | -1.1             | 8.1                                      | -0.3     | -2.3             |
| Seasonally Adjusted   | n.a                              | n.a      | n.a              | 8.4                                      | -0.4     | -2.3             |

MN and the U.S., Employment & Unemployment Rate



MN, 1982 and 1983





# Minnesota Nonagricultural Wage & Salary Employment, Hours, and Earnings

| INDUSTRY                          | EMPLOYMENT <sup>1/</sup><br>(thousands) |              |              | PER CENT<br>CHANGE<br>FROM |              | PRODUCTION WORKERS' HOURS & EARNINGS |              |                               |              |                            |              |
|-----------------------------------|-----------------------------------------|--------------|--------------|----------------------------|--------------|--------------------------------------|--------------|-------------------------------|--------------|----------------------------|--------------|
|                                   |                                         |              |              |                            |              | Average<br>Weekly<br>Earnings        |              | Average<br>Hourly<br>Earnings |              | Average<br>Weekly<br>Hours |              |
|                                   | Nov.<br>1983                            | Oct.<br>1983 | Nov.<br>1982 | Oct.<br>1983               | Nov.<br>1982 | Nov.<br>1983                         | Oct.<br>1983 | Nov.<br>1983                  | Oct.<br>1983 | Nov.<br>1983               | Oct.<br>1983 |
| TOTAL NONAGRICULTURAL             | 1742.2                                  | 1744.3       | 1702.7       | -0.1                       | 2.3          |                                      |              |                               |              |                            |              |
| MANUFACTURING                     | 342.3                                   | 345.5        | 336.5        | -0.9                       | 1.7          | 391.88                               | 391.64       | 9.70                          | 9.67         | 40.4                       | 40.5         |
| Durable Goods                     | 203.5                                   | 204.7        | 198.4        | -0.1                       | 2.5          | 404.09                               | 406.23       | 9.88                          | 9.86         | 40.9                       | 41.2         |
| Furniture, Lumber and Wood        | 13.7                                    | 13.7         | 12.7         | 0                          | 8.1          | 406.61                               | 404.81       | 10.32                         | 10.07        | 39.4                       | 40.2         |
| Stone, Clay and Glass             | 8.3                                     | 8.5          | 8.6          | -2.9                       | -3.4         | 371.71                               | 380.82       | 9.68                          | 9.69         | 38.4                       | 39.3         |
| Primary Metals                    | 4.9                                     | 5.0          | 5.0          | -2.2                       | -3.2         | 372.86                               | 371.13       | 8.92                          | 8.90         | 41.8                       | 41.7         |
| Fabricated Metals                 | 33.6                                    | 33.5         | 32.6         | 0.3                        | 3.0          | 454.28                               | 463.29       | 11.08                         | 11.11        | 41.0                       | 41.7         |
| Nonelectrical Machinery           | 80.0                                    | 79.8         | 76.9         | 0.2                        | 4.0          | 416.83                               | 411.76       | 10.02                         | 9.97         | 41.6                       | 41.3         |
| Electrical Machinery              | 25.2                                    | 26.0         | 25.7         | -3.2                       | -1.9         | 343.60                               | 346.08       | 8.36                          | 8.40         | 41.1                       | 41.2         |
| Transportation Equipment          | 6.1                                     | 6.2          | 4.8          | -1.7                       | 26.7         | 468.68                               | 502.81       | 11.08                         | 11.35        | 42.3                       | 44.3         |
| Other Durable Goods <sup>2/</sup> | 31.7                                    | 31.9         | 32.1         | -0.7                       | -1.1         | 382.86                               | 383.64       | 9.43                          | 9.38         | 40.6                       | 40.9         |
| Nondurable Goods                  | 138.9                                   | 140.7        | 138.0        | -1.3                       | 0.6          | 375.56                               | 373.03       | 9.46                          | 9.42         | 39.7                       | 39.6         |
| Food and Kindred                  | 45.0                                    | 46.8         | 46.5         | -3.9                       | -3.2         | 336.56                               | 330.00       | 8.31                          | 8.25         | 40.5                       | 40.0         |
| Textile and Apparel               | 4.6                                     | 4.7          | 4.6          | -1.8                       | 0            | 219.32                               | 227.33       | 5.88                          | 6.03         | 37.3                       | 37.7         |
| Paper and Allied                  | 32.5                                    | 32.5         | 31.7         | 0.1                        | 2.7          | 469.70                               | 473.00       | 11.00                         | 11.00        | 42.7                       | 43.0         |
| Printing and Publishing           | 35.6                                    | 35.6         | 35.5         | 0.1                        | 0.2          | 375.22                               | 375.81       | 10.28                         | 10.24        | 36.5                       | 36.7         |
| Chemical and Petroleum            | 9.2                                     | 9.2          | 9.0          | -0.4                       | 2.8          | 427.67                               | 432.22       | 10.91                         | 10.97        | 39.2                       | 39.4         |
| Rubber and Leather                | 12.0                                    | 11.9         | 10.8         | 0.1                        | 10.7         | 312.70                               | 311.12       | 8.08                          | 8.06         | 38.7                       | 38.6         |
| NONMANUFACTURING                  | 1399.9                                  | 1398.8       | 1366.2       | 0.1                        | 2.5          |                                      |              |                               |              |                            |              |
| Mining and Quarrying              | 7.2                                     | 7.7          | 6.6          | -6.1                       | 9.0          | 424.04                               | 404.54       | 12.15                         | 12.04        | 34.9                       | 33.6         |
| Metal Mining                      | 5.1                                     | 5.4          | 4.6          | -5.3                       | 10.4         | 444.21                               | 414.17       | 13.26                         | 13.19        | 33.5                       | 31.4         |
| Construction                      | 67.9                                    | 71.6         | 62.2         | -5.1                       | 9.2          | 518.26                               | 559.09       | 14.64                         | 14.83        | 35.4                       | 37.7         |
| Building                          | 19.9                                    | 19.8         | 17.3         | 0.5                        | 14.7         | 302.95                               | 522.06       | 13.63                         | 13.56        | 36.9                       | 38.5         |
| Highway and Heavy                 | 12.4                                    | 14.8         | 10.7         | -16.1                      | 15.6         | 480.60                               | 525.72       | 13.35                         | 13.48        | 36.0                       | 39.0         |
| Special Trades                    | 35.6                                    | 37.0         | 34.1         | -3.7                       | 4.4          | 540.02                               | 594.91       | 15.79                         | 16.21        | 34.2                       | 36.7         |
| Transportation                    | 61.3                                    | 62.4         | 61.5         | -1.7                       | -0.2         |                                      |              |                               |              |                            |              |
| Railroads                         | 13.1                                    | 13.3         | 13.3         | -1.5                       | -1.4         | 528.75                               | 528.75       | 11.42                         | 11.42        | 46.3                       | 46.3         |
| Trucking and Warehousing          | 23.7                                    | 23.8         | 23.2         | -0.4                       | 2.1          | 443.70                               | 446.22       | 12.09                         | 12.06        | 36.7                       | 37.0         |
| Public Utilities                  | 33.2                                    | 33.2         | 33.6         | 0                          | -1.3         | 505.77                               | 507.06       | 12.55                         | 12.52        | 40.3                       | 40.5         |
| Communications                    | 19.0                                    | 18.9         | 19.5         | 0.3                        | -2.8         | 470.26                               | 470.66       | 11.64                         | 11.65        | 40.4                       | 40.4         |
| Elec., Gas and Sanitary           | 14.2                                    | 14.3         | 14.1         | -0.4                       | 0.9          | 545.92                               | 547.29       | 13.58                         | 13.48        | 40.2                       | 40.6         |
| Trade                             | 442.2                                   | 440.2        | 431.4        | 0.5                        | 2.5          | 227.61                               | 228.97       | 7.39                          | 7.41         | 30.8                       | 30.9         |
| Retail                            | 330.3                                   | 327.6        | 319.7        | 0.8                        | 3.3          | 182.18                               | 184.32       | 6.37                          | 6.40         | 28.6                       | 28.8         |
| General Merchandise               | 48.6                                    | 46.5         | 47.1         | 4.5                        | 3.2          | 163.52                               | 165.84       | 5.84                          | 5.86         | 28.0                       | 28.3         |
| Food Stores                       | 45.5                                    | 46.0         | 44.9         | -1.1                       | 1.4          | 210.33                               | 209.31       | 7.38                          | 7.37         | 28.5                       | 28.4         |
| Automotive                        | 34.6                                    | 34.6         | 33.5         | -0.1                       | 3.1          | 310.95                               | 309.38       | 8.27                          | 8.25         | 37.6                       | 37.5         |
| Eating and Drinking               | 107.4                                   | 108.5        | 104.6        | -1.0                       | 2.7          | 111.16                               | 112.33       | 4.71                          | 4.70         | 23.6                       | 23.9         |
| Wholesale                         | 111.9                                   | 112.6        | 111.7        | -0.6                       | 0.2          | 387.21                               | 389.09       | 10.11                         | 10.08        | 38.3                       | 38.6         |
| F.I.R.E.                          | 99.9                                    | 99.4         | 97.7         | 0.4                        | 2.2          |                                      |              |                               |              |                            |              |
| Finance                           | 48.0                                    | 47.7         | 45.9         | 0.6                        | 4.6          |                                      |              |                               |              |                            |              |
| Insurance                         | 35.7                                    | 35.5         | 35.4         | 0.4                        | 0.7          |                                      |              |                               |              |                            |              |
| Real Estate                       | 16.2                                    | 16.1         | 16.4         | 0.1                        | -1.5         |                                      |              |                               |              |                            |              |
| Service Industries                | 394.8                                   | 395.4        | 381.6        | -0.1                       | 3.5          |                                      |              |                               |              |                            |              |
| Hotel and Lodging                 | 20.6                                    | 20.7         | 19.3         | -0.4                       | 6.6          |                                      |              |                               |              |                            |              |
| Business Services                 | 60.4                                    | 60.2         | 57.6         | 0.5                        | 5.0          |                                      |              |                               |              |                            |              |
| Health Services                   | 135.7                                   | 135.7        | 133.1        | 0                          | 2.0          |                                      |              |                               |              |                            |              |
| Private Education                 | 24.6                                    | 24.5         | 24.4         | 0.4                        | 1.0          |                                      |              |                               |              |                            |              |
| Soc. Serv., Museums etc.          | 84.3                                    | 84.1         | 81.5         | 0.3                        | 3.6          |                                      |              |                               |              |                            |              |
| Government                        | 293.4                                   | 289.0        | 291.6        | 1.5                        | 0.6          |                                      |              |                               |              |                            |              |
| Federal                           | 30.1                                    | 29.9         | 30.0         | 0.5                        | 0.2          |                                      |              |                               |              |                            |              |
| State                             | 75.9                                    | 74.8         | 74.6         | 1.5                        | 1.8          |                                      |              |                               |              |                            |              |
| Local                             | 187.4                                   | 184.2        | 187.0        | 1.7                        | 0.2          |                                      |              |                               |              |                            |              |

<sup>1/</sup> Totals may not add because of rounding.

<sup>2/</sup> Includes Scientific Instruments and Miscellaneous Industries.

# Labor Force Data: State, SMSAs, and Counties

| Area or County                             | November, 1983 Prelim.       |        |             | Area or County          | November, 1983 Prelim.       |        |             |
|--------------------------------------------|------------------------------|--------|-------------|-------------------------|------------------------------|--------|-------------|
|                                            | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |                         | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |
| State of Minnesota                         | 2223253                      | 150847 | 6.8         | Lake                    | 4524                         | 1470   | 32.5        |
| <b>Metropolitan Areas</b>                  |                              |        |             | Lake of the Woods       | 1998                         | 220    | 11.0        |
| Duluth/Superior<br>(Duluth City Only)      | 35323                        | 3161   | 8.9         | Le Sueur                | 11352                        | 919    | 8.1         |
| Fargo/Moorhead<br>(Clay County, MN Only)   | 28800                        | 1551   | 5.4         | Lincoln                 | 3795                         | 185    | 4.9         |
| Minneapolis/St. Paul SMSA <sup>2/</sup>    | 1216450                      | 65889  | 5.4         | Lyon                    | 15437                        | 946    | 6.1         |
| Rochester SMSA <sup>3/</sup> (Olmsted Co.) | 62271                        | 2993   | 4.8         | McLeod                  | 17448                        | 1034   | 5.9         |
| St. Cloud SMSA                             | 80728                        | 7482   | 9.3         | Mahnomen                | 2897                         | 266    | 9.2         |
| <b>Counties</b>                            |                              |        |             | Marshall                | 6476                         | 647    | 10.0        |
| Aitkin                                     | 5466                         | 785    | 14.4        | Martin                  | 13578                        | 810    | 6.0         |
| Anoka                                      | 115413                       | 6492   | 5.6         | Meeker                  | 11090                        | 800    | 7.2         |
| Becker                                     | 12614                        | 1356   | 10.7        | Mille Lacs              | 9067                         | 893    | 9.8         |
| Beltrami                                   | 16729                        | 1346   | 8.0         | Morrison                | 12611                        | 1361   | 10.8        |
| Benton                                     | 12623                        | 1323   | 10.5        | Mower                   | 18383                        | 1257   | 6.8         |
| Big Stone                                  | 3936                         | 208    | 5.3         | Murray                  | 6219                         | 405    | 6.5         |
| Blue Earth                                 | 29314                        | 1566   | 5.3         | Nicollet                | 14968                        | 684    | 4.6         |
| Brown                                      | 15510                        | 995    | 6.4         | Nobles                  | 12207                        | 848    | 6.9         |
| Carlton                                    | 12181                        | 1280   | 10.5        | Norman                  | 4674                         | 266    | 5.7         |
| Carver                                     | 21483                        | 896    | 4.2         | Olmsted                 | 62271                        | 2993   | 4.8         |
| Cass                                       | 10513                        | 1273   | 12.1        | Otter Tail              | 24906                        | 1902   | 7.6         |
| Chippewa                                   | 7272                         | 582    | 8.0         | Pennington              | 6607                         | 516    | 7.8         |
| Chisago                                    | 15225                        | 933    | 6.1         | Pine                    | 9797                         | 1014   | 10.4        |
| Clay                                       | 28800                        | 1551   | 5.4         | Pipestone               | 5746                         | 317    | 5.5         |
| Clearwater                                 | 3972                         | 559    | 14.1        | Polk                    | 16158                        | 1163   | 7.2         |
| Cook                                       | 2175                         | 294    | 13.5        | Pope                    | 5550                         | 413    | 7.4         |
| Cottonwood                                 | 7432                         | 399    | 5.4         | Ramsey                  | 270542                       | 15029  | 5.6         |
| Crow Wing                                  | 17566                        | 1974   | 11.2        | Red Lake                | 2187                         | 281    | 12.8        |
| Dakota                                     | 114093                       | 6221   | 5.5         | Redwood                 | 10822                        | 567    | 5.2         |
| Dodge                                      | 8413                         | 556    | 6.6         | Renville                | 12262                        | 824    | 6.7         |
| Douglas                                    | 13734                        | 956    | 7.0         | Rice                    | 24365                        | 1839   | 7.5         |
| Faribault                                  | 10681                        | 658    | 6.2         | Rock                    | 5755                         | 261    | 4.5         |
| Fillmore                                   | 12341                        | 738    | 6.0         | Roseau                  | 5959                         | 701    | 11.8        |
| Freeborn                                   | 18191                        | 1419   | 7.8         | St. Louis (Inc. Duluth) | 92635                        | 15625  | 16.9        |
| Goodhue                                    | 20174                        | 1242   | 6.2         | Scott                   | 25757                        | 1425   | 5.5         |
| Grant                                      | 3581                         | 203    | 5.7         | Sherburne               | 14564                        | 1146   | 7.9         |
| Hennepin                                   | 552556                       | 29392  | 5.3         | Sibley                  | 8548                         | 577    | 6.8         |
| Houston                                    | 10468                        | 605    | 5.8         | Stearns                 | 53541                        | 5013   | 9.4         |
| Hubbard                                    | 5698                         | 690    | 12.1        | Steele                  | 16613                        | 1045   | 6.3         |
| Isanti                                     | 10516                        | 845    | 8.0         | Stevens                 | 5902                         | 253    | 4.3         |
| Itasca                                     | 17950                        | 2529   | 14.1        | Swift                   | 6312                         | 415    | 6.6         |
| Jackson                                    | 8114                         | 405    | 5.0         | Todd                    | 11909                        | 910    | 7.6         |
| Kanabec                                    | 5574                         | 547    | 9.8         | Traverse                | 2908                         | 207    | 7.1         |
| Kandiyohi                                  | 19013                        | 1207   | 6.3         | Wabasha                 | 9777                         | 686    | 7.0         |
| Kittson                                    | 3433                         | 268    | 7.8         | Wadena                  | 5677                         | 528    | 9.3         |
| Koochiching                                | 7688                         | 863    | 11.2        | Waseca                  | 9153                         | 537    | 5.9         |
| Lac qui Parle                              | 5856                         | 327    | 5.6         | Washington              | 66471                        | 3357   | 5.1         |
|                                            |                              |        |             | Watsonwan               | 7082                         | 428    | 6.0         |
|                                            |                              |        |             | Wilkin                  | 4475                         | 245    | 5.5         |
|                                            |                              |        |             | Winona                  | 23488                        | 1622   | 6.9         |
|                                            |                              |        |             | Wright                  | 34910                        | 2144   | 6.1         |
|                                            |                              |        |             | Yellow Medicine         | 7582                         | 370    | 4.9         |

## Technical Notes:

1/ Labor force data is computed according to BLS methodology. The method includes an adjustment to assure that the sum of the substate areas equals the separately estimated State total. This adjustment is applied to all county and SMSA areas. County and area unemployment was multiplied by an adjustment factor of 1.65; employment was multiplied by 1.05. For a more detailed explanation see the Review of Labor and Economic Conditions, Vol. 4, No. 4, (February 1978 issue), p. 29.

2/ Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright Counties.

3/ Benton, Sherburne, and Stearns Counties.

# Selected Minnesota Program Statistics

## Characteristics of the Insured Unemployed

Tables 1 and 2 provide data on persons who filed a claim for unemployment compensation in Minnesota during the month. Only those claiming benefits from the regular State program are represented since data on the characteristics of Federal employees and veterans are not available.

In November, the total number of claimants for unemployment benefits in Minnesota rose by 5,236 or 18.9 percent. This over-the-month gain was below the average October to November increase of the past five years in both numerical and percentage terms. Less than average gains occurred in all of the industries except public utilities where the gain was not significant. Over-the-year, the total number of claimants declined by 29,050 or 45.8 percent. The November over-the-year drop was the ninth in a row, the declines averaging 47 percent since July. Nearly one half of the over-the-year decrease was among claimants in manufacturing. Significant reductions also occurred in the services and construction industries.

**Table 1. Distribution of Insured Unemployed, By Age and Sex, November, 1983**

| Age Groups  | Number | Percent Distributions |            |                |
|-------------|--------|-----------------------|------------|----------------|
|             |        | Men of Totals         | Men of Men | Women of Women |
| TOTALS      | 32976  | 67.9                  | 100.0      | 100.0          |
| Under 45    | 24826  | 68.5                  | 76.0       | 73.8           |
| Under 25    | 6205   | 67.5                  | 18.7       | 19.1           |
| 25-34       | 11733  | 70.1                  | 36.7       | 33.1           |
| 35-44       | 6888   | 66.8                  | 20.6       | 21.6           |
| 45 and Over | 8150   | 66.0                  | 24.0       | 26.2           |
| 45-54       | 4631   | 66.7                  | 13.8       | 14.6           |
| 55 and Over | 3519   | 65.1                  | 10.2       | 11.6           |

**Table 2. Distribution of Insured Unemployed By Industry and Occupation, November, 1983**

| Industry and Occupational Attachment | Number | Percent of Total | Percent Long-Term Unemployed <sup>1/</sup> | Women as Percent of Total |
|--------------------------------------|--------|------------------|--------------------------------------------|---------------------------|
| Total, All Industries                | 32976  | 100.0            | 17.0                                       | 32.3                      |
| Ag., For., Fish.                     | 609    | 1.8              | 8.9                                        | 24.1                      |
| Mining                               | 3195   | 9.7              | 8.4                                        | 4.6                       |
| Construction                         | 4806   | 14.6             | 6.5                                        | 5.6                       |
| Manufacturing                        | 7817   | 23.7             | 15.3                                       | 33.3                      |
| Pub. Utilities                       | 1212   | 3.7              | 19.5                                       | 24.3                      |
| Wholesale Trade                      | 2119   | 6.4              | 25.2                                       | 28.1                      |
| Retail Trade                         | 3911   | 11.9             | 25.4                                       | 44.3                      |
| Fin., Ins., Real Est.                | 888    | 2.7              | 32.8                                       | 54.2                      |
| Services                             | 6027   | 18.3             | 25.6                                       | 67.4                      |
| Public Admin.                        | 966    | 2.9              | 12.1                                       | 43.5                      |
| Inf. Not Available                   | 1426   | 4.3              | 0.8                                        | 33.5                      |
| Total, All Occupations               | 32976  | 100.0            | 17.0                                       | 32.3                      |
| Prof., Tech., Mgr.                   | 4789   | 14.5             | 34.1                                       | 41.6                      |
| Clerical                             | 3933   | 11.9             | 27.1                                       | 81.6                      |
| Sales                                | 1295   | 3.9              | 27.2                                       | 34.4                      |
| Services                             | 2967   | 9.0              | 18.9                                       | 57.2                      |
| Farm., For., Fish.                   | 624    | 1.9              | 5.3                                        | 21.6                      |
| Processing                           | 1214   | 3.7              | 13.3                                       | 25.4                      |
| Machine Trades                       | 1882   | 5.7              | 13.9                                       | 12.5                      |
| Benchwork                            | 3231   | 9.8              | 9.8                                        | 50.6                      |
| Structural Work                      | 6274   | 19.0             | 7.5                                        | 4.1                       |
| Misc.                                | 6393   | 19.4             | 10.8                                       | 9.3                       |
| Inf. Not Available                   | 374    | 1.2              | 25.7                                       | 57.1                      |

<sup>1/</sup> Long-Term unemployed refers to unemployment insurance claimants whose current spell of unemployment has lasted 15 weeks or longer.

## Job Service Applicant Supply and Demand

Table 3 compares Job Service (J.S.) job applicants with the J.S. job openings that existed at the end of the month. These comparisons are expressed as supply/demand ratios. Other things being equal, the greater the ratio of applicants to openings, the greater the competition has been for work within that occupational category. To put these ratios into context, the reader must remember that not only do job seekers and employers in general find jobs or recruit workers through other means, but those interested in certain kinds of jobs are particularly unlikely to use the J.S. For example, workers seeking professional and Managerial jobs are least likely to use the J.S., whereas employers usually recruit construction workers through union halls and hire teachers directly. Thus, the main value of Table 3 is that it reflects, for broad occupational groups, the relative labor market conditions that those using the J.S. encountered when seeking work.

**Table 3. Experienced Supply/Job Openings Demand <sup>1/</sup>**

| Occupation          | Applicants (Supply) | Job Openings (Demand) | Supply/Demand Ratio |  |
|---------------------|---------------------|-----------------------|---------------------|--|
|                     |                     |                       |                     |  |
| Total               |                     |                       |                     |  |
| Prof., Tech., Mgr.  |                     |                       |                     |  |
| Clerical            |                     |                       |                     |  |
| Sales               |                     |                       |                     |  |
| Dom. Services       |                     |                       |                     |  |
| Other Services      |                     |                       |                     |  |
| Farm., Fish., For.  |                     |                       |                     |  |
| Processing          |                     |                       |                     |  |
| Machine Trades      |                     |                       |                     |  |
| Benchwork           |                     |                       |                     |  |
| Structural Work     |                     |                       |                     |  |
| Mtr. Frght., Trans. |                     |                       |                     |  |
| Pkg. & Mat. Hndlg.  |                     |                       |                     |  |
| Other               |                     |                       |                     |  |

Data for Table 3 is not available due to processing problems. This information will be included in future issues if it becomes available.

<sup>1/</sup> Inexperienced and improperly coded job applicants are not included in this table.



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MINNESOTA DEPARTMENT OF ECONOMIC SECURITY

RESEARCH AND STATISTICAL SERVICES OFFICE

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Manuscripts of articles are welcomed and should be submitted to the Editor. Articles on labor market conditions and the economic welfare of Minnesota workers are preferred, but subjects which can be shown to be closely related to general economic conditions within the State will also be considered. Articles should be submitted complete with tables and graphs. Length generally should not exceed the equivalent of ten single-spaced typewritten pages, including graphs, references, and notes.

All signed articles appearing in this publication together with the Editorial Comment represent the views of the author or editor and not necessarily those of the Department. Questions or comments to the authors may be directed to the Research and Statistical Services Office of the Minnesota Department of Economic Security, 390 N. Robert Street, St. Paul, Minnesota, 55101 or (612) 296-6545.

Comments and other correspondence concerning the publication should be addressed to the Editor.

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# Editorial Comment

By R. Pinola

## WHAT'S WRONG IN EDUCATION

The failures of the K-12 educational program in the United States have been amply documented and publicized in recent months. Scarcely a day passes that we haven't been fed with some new charges of failure and new recommendations for corrective action. Unfortunately, as with many social and economic problems, recommended courses of action are directed toward treating the symptoms rather than the causes. But even in the treatment of symptoms one finds recommendations that are logically inconsistent. For example, while decrying the failure of the system to teach students to read, write and compute, advocates of high-technology recommend more spending on high-level technical training as if, somehow, this will automatically teach Johnny to read. <sup>1/</sup>

Having labored in the vineyards of higher education for 17 years and also observing the operation of our K-12 programs in many states, we have developed some personal ideas about the problem and its causes. First, our experience and observation indicates that the American public and the educational establishment lacks a definitive conceptualization of what the educational system should produce. To put it another way, insufficient consideration has been given to formulating an explicit set of measurable and testable objectives and standards that can be used to evaluate performance. Instead, the objectives put forth are vague or generalized statements about good citizenship and the development of skills which are assumed to be acquired by mere attendance in classes varying in content and level of instruction. Without an explicit set of objectives and standards for measuring their achievement, we fail to see how it is possible to determine whether the present curriculum and instructional systems are effective or not. As a result, it is difficult to do more than address symptoms, and hope for the best.

Our second observation is that the governance of our educational system is largely based on political considerations rather than knowledge of what the educational process should achieve. What this means is that we operate in an environment where management of the system is evaluated by using the criteria of "hear-no-evil, speak no evil", which boils down to keeping everyone happy. It also means that problems are apt to be resolved by throwing more money at them or, alternatively, promoting grade inflation, countenancing universal passing of students, and designing curriculums that often lack challenge. While the condition is more generally recognized as existent in the K-12 program, it is equally prevalent in much of higher education as well. Having taught senior undergraduate and graduate students in various universities, we can vouch for the fact that, in far too many cases, students are allowed to progress or advance in lock-step fashion without regard to competencies in subject matter, language usage, and problems analysis. Moreover, when a few attempt to establish and maintain standards, they are chastised and castigated beyond belief. In short, the game plan is to make no waves and keep everyone happy.

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1/ A similar anachronism applies with respect to putting more emphasis and funds into foreign language instruction when the record indicates serious deficiencies in the usage of the native language. In the late 1950s, considerable sums of money were pumped into the then-heralded language laboratories that promised to remedy the deficiencies of foreign language instruction. Apparently no one bothered asking how you raise the level of proficiency in foreign language when students were disinclined to raise their proficiency in their native tongue.



Closely related to our first and second observations is the reward system that exists in most educational institutions. It is well known that the equal rewarding of incompetents and competents not only discourages the competent, but induces them to leave the system, yet nobody wants to force a change. The end result is a system in which standards mean little or nothing, grade inflation is rampant, making waves is discouraged, and the public treasury is used to finance bigger and better promotions. It is a system in which an equal opportunity to succeed is not matched by an equal opportunity to fail, and as long as this element is missing, we can expect a disproportionate number of our students to continue to be unable to read a newspaper, balance a checkbook, and do decimal fractions.

#### SOME IMPLICATIONS OF STRUCTURAL CHANGE IN OUR ECONOMY

It is well known that the industrial composition of economic activity and employment has changed dramatically in the United States over the past 40 years. A similar shift in the composition of economic activity has occurred in the composition of female employment as the services sector became an increasingly larger proportion of total employment and the women's share of industry employment rose substantially. <sup>2/</sup> This increase in job opportunities has probably been the single largest contributing factor to the substantial increase in female labor force participation rates over the past 40 years.

The significance of this structural change shows up in recent comparisons of male and female unemployment rates which show female rates falling below male rates for most of the months over the 1981-82 economic downturn. Given the projections of industry employment to 1990 by the Bureau of Labor Statistics, it appears that female employment is destined to grow faster than male employment and that female unemployment rates are likely to fall below male rates over much of the period. The only conditions reversing this trend would be a substantial decline in male labor force participation rates or a disproportionate increase in female participation rates, neither of which seems likely to occur over the next six years.

Perhaps a more significant prospect is that with female employment becoming an increasing proportion of total employment, personal income will grow more slowly unless total employment grows faster than in the past or wage increases outpace those of earlier years. Again, it appears that neither of these two conditions will obtain and that the Nation is destined for slower growth in personal income even if employment and wage rates grow at the same pace as in the past. One factor that we have not included in our calculations is the possible increase in part-time employment as more women become employed. The effect of this would be to further reduce personal income growth, but causing comparative male-female unemployment rates to swing either way, depending on the cyclical sensitivity of future part-time jobs.

Finally, the effect of slower growth in wage and salary disbursements on Social Security contributions may necessitate a re-examination of tax rates in order to meet cash outflows. Whether this eventuality was considered by the recent study commission is unknown, but it may require careful examination before too long.

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<sup>2/</sup> By 1980, the women's share of industry employment exceeded 50 percent in the Retail Trade, Services, Government, and Finance, Insurance, and Real Estate sectors.

# Research Summaries

## COMPARING WAGE LEVELS BETWEEN METROPOLITAN AREAS

By B. Steuernagel

Is the Minneapolis-St. Paul metropolitan area a high wage area? The answer to this question is not clear cut. This research summary reports on two data series collected by the Bureau of Labor Statistics which allow some comparison of wage levels in metropolitan areas of the United States. The data for overall wage levels show that the Twin Cities area tend to be in the middle when compared to similarly sized metropolitan areas, but the rate of increase between 1981 and 1982 was faster than most metropolitan areas studied and there are distinct differences when it comes to occupational groups.

Overall wage levels for twelve large metropolitan areas from various regions of the country were compared using average annual pay in 1982 for workers covered by State and Federal Unemployment Insurance (UI). Workers covered by UI include production and sales workers, corporation officials, executives, supervisory personnel, and clerical workers. Excluded from coverage are most employees of railroads, most domestic workers, most student workers at school, elected officials, self-employed individuals and all unpaid family workers. Average annual pay was computed by dividing total annual payrolls of employers covered by UI by average monthly employment for these employers. Included in the annual payroll data are bonuses, the cash value of meals and lodging when supplied, and tips and other gratuities. Average annual pay only approximates annual earnings because an individual may not be employed by the same employer all year or may work for more than one employer. In addition, the UI data includes both full-time and part-time workers. Therefore some differences will be due to differences in the industry structure of a metropolitan area.

| Average Annual Pay for 1982 for all Covered Workers<br>in Selected Metropolitan Areas |                          |                    |                             |                                      |                             |
|---------------------------------------------------------------------------------------|--------------------------|--------------------|-----------------------------|--------------------------------------|-----------------------------|
| Area                                                                                  | Oct. 1983<br>Labor Force | Average Annual Pay |                             | Ranking of 314<br>Metropolitan Areas |                             |
|                                                                                       |                          | 1982               | Percent Change<br>1981-1982 | 1982                                 | Percent Change<br>1981-1982 |
| 1. Houston                                                                            | 1,794,300                | \$ 21,027          | 8.0                         | 4                                    | 39                          |
| 2. San Jose                                                                           | 842,800                  | 20,536             | 10.1                        | 5                                    | 2                           |
| 3. San Francisco                                                                      | 1,790,800                | 20,458             | 9.3                         | 6                                    | 8                           |
| 4. Detroit <sup>1/</sup>                                                              | 1,967,800                | 20,264             | 3.8                         | 10                                   | 265                         |
| 5. Washington, DC                                                                     | 1,805,900                | 19,562             | 8.8                         | 13                                   | 16                          |
| 6. Newark                                                                             | 986,700                  | 19,287             | 9.1                         | 18                                   | 11                          |
| 7. Chicago                                                                            | 3,427,100                | 19,189             | 6.6                         | 22                                   | 124                         |
| 8. MPLS-ST. PAUL <sup>2/</sup>                                                        | 1,209,400                | 17,777             | 8.7                         | 53                                   | 20                          |
| 9. St. Louis                                                                          | 1,131,000                | 17,742             | 7.3                         | 54                                   | 85                          |
| 10. Pittsburgh <sup>1/</sup>                                                          | 1,026,900                | 17,721             | 4.7                         | 56                                   | 236                         |
| 11. Milwaukee                                                                         | 718,600                  | 17,622             | 7.2                         | 62                                   | 88                          |
| 12. Atlanta                                                                           | 1,107,300                | 17,096             | 7.0                         | 80                                   | 95                          |
| All 314 Metro Areas                                                                   |                          | 17,327             | 6.8                         |                                      |                             |

<sup>1/</sup> September 1983.  
<sup>2/</sup> 1983 OMB definition includes St. Croix Co. in Wisconsin and Isanti Co. in Minnesota.

A second source of data for comparing wage levels is the Area Wage Survey, a survey of selected office, professional and technical, maintenance, materials movement, and custodial occupations conducted annually by the Bureau of Labor Statistics. The survey collects information from establishments employing 50 or more workers in all industries except mining, construction, and government. The table on the following page compares wages for the selected occupations.

The results for the Twin Cities area are sharply different than those of other metropolitan areas. Occupational wage levels in other metropolitan areas tend to be uniformly above average or below average. For example, low wage areas such as Atlanta and Pittsburgh showed below average wages in the majority of occupations. Similarly, high wage areas displayed above average wages in the majority of occupations. However, the Minneapolis-St. Paul area diverged from this pattern in that wages for maintenance and material movement occupations were above average while those for professional, technical, and office were below average. There are no clear reasons for the difference at this time. One can speculate that the above average wages in plant maintenance and material movement occupations in the Twin Cities reflects higher wages paid to union workers in manufacturing and transportation industries. However, it is not easy to explain why wages in the professional, technical and office occupations are among the lowest of these selected metropolitan areas given the high cost of living, low unemployment rates, and demand for labor from the industries which employ these occupations.

| 1983 AVERAGE HOURLY AND WEEKLY EARNINGS FOR SELECTED OCCUPATIONS IN 12 METROPOLITAN AREAS |              |                         |            |            |            |            |              |           |               |              |               |             |               |
|-------------------------------------------------------------------------------------------|--------------|-------------------------|------------|------------|------------|------------|--------------|-----------|---------------|--------------|---------------|-------------|---------------|
| Occupation                                                                                | 12 Area Ave. | Minneapolis-St. Paul MN | Atlanta GA | Chicago IL | Detroit MI | Houston TX | Milwaukee WI | Newark NJ | Pittsburgh PA | St. Louis MO | SF-Oakland CA | San Jose CA | Washington DC |
| <b>Plant &amp; Maint. -hrly</b>                                                           |              |                         |            |            |            |            |              |           |               |              |               |             |               |
| Carpenter                                                                                 | \$ 12.51     | \$ 12.64                | \$ 10.98   | \$ 12.91   | \$ 12.94   | \$ 12.54   | \$ 12.46     | \$ 11.66  | \$ 11.59      | \$ 12.13     | \$ 13.95      | \$ 12.94    | \$ 13.12      |
| Electrician                                                                               | 13.00        | 13.27                   | 11.90      | 12.95      | 13.33      | 13.42      | 13.54        | 11.84     | 12.55         | 12.67        | 13.77         | 13.72       | -             |
| Painter                                                                                   | 12.03        | 12.75                   | 13.38      | 12.51      | 13.05      | 12.49      | 12.64        | 11.35     | 10.10         | 11.50        | 13.80         | -           | 8.76          |
| Machinist                                                                                 | 12.92        | 12.61                   | 13.25      | 12.67      | 11.96      | 13.53      | 13.91        | 11.28     | 12.37         | 12.89        | 14.75         | -           | -             |
| Mach. Mech.                                                                               | 11.84        | 11.25                   | 10.36      | 12.49      | 12.20      | 12.48      | 11.56        | 0.59      | 11.68         | 11.05        | 13.28         | 12.27       | -             |
| Veh. Mech.                                                                                | 12.33        | 12.52                   | 11.83      | 13.97      | 12.96      | 11.05      | 12.10        | 11.13     | 11.90         | 11.20        | 14.41         | 13.32       | 11.62         |
| Tool & Die                                                                                | 13.24        | 12.93                   | 11.54      | 13.13      | 13.09      | 13.47      | 13.77        | 11.45     | 11.93         | 13.42        | 15.93         | 14.93       | -             |
| Engineer                                                                                  | 12.29        | 11.45                   | 11.45      | 13.69      | 12.92      | 11.37      | 11.58        | 12.03     | 12.16         | 12.32        | 14.30         | -           | 11.94         |
| <b>Material Movmt. -hrly</b>                                                              |              |                         |            |            |            |            |              |           |               |              |               |             |               |
| Truckdriver                                                                               | 11.05        | 12.38                   | 9.15       | 12.82      | 11.59      | 8.36       | 10.73        | 11.09     | 11.18         | 11.61        | 12.85         | 12.15       | 8.67          |
| Shipper/Receiv.                                                                           | 8.18         | 8.83                    | 7.83       | 8.23       | 9.43       | 6.84       | 8.51         | 7.47      | 9.39          | 8.61         | 8.65          | 6.84        | 7.71          |
| Warehouseman                                                                              | 9.13         | 10.81                   | 9.38       | 9.87       | 8.70       | 9.29       | 9.02         | 8.33      | 8.80          | 8.87         | 11.26         | 7.99        | 7.26          |
| Laborer                                                                                   | 8.86         | 10.53                   | 8.41       | 10.13      | 11.13      | 6.54       | 9.55         | 6.65      | 9.13          | 9.62         | 9.47          | 7.74        | 7.42          |
| Forklift Op.                                                                              | 9.38         | 10.10                   | 8.43       | 9.33       | 11.19      | 8.33       | 9.65         | 8.43      | 9.89          | 10.02        | 10.64         | 9.60        | 6.91          |
| Guard                                                                                     | 5.43         | 5.62                    | 4.90       | 5.31       | 7.36       | 5.60       | 5.06         | 4.77      | 4.63          | 5.36         | 5.54          | 5.97        | 5.04          |
| Janitor                                                                                   | 5.70         | 5.84                    | 4.05       | 6.71       | 7.20       | 3.94       | 5.29         | 5.05      | 5.83          | 5.13         | 8.33          | 6.99        | 4.08          |
| <b>Prof. &amp; Tech. -wkly</b>                                                            |              |                         |            |            |            |            |              |           |               |              |               |             |               |
| Comp. Analyst                                                                             | 575.67       | 544.50                  | 598.00     | 566.00     | 603.50     | 626.50     | 553.50       | 586.50    | 531.00        | 576.00       | 589.00        | 611.00      | 522.50        |
| Programmer                                                                                | 458.54       | 437.50                  | 443.00     | 449.50     | 477.00     | 515.50     | 416.50       | 461.50    | 397.50        | 430.00       | 503.50        | 512.00      | 459.00        |
| Comp. Op.                                                                                 | 341.00       | 309.50                  | 347.50     | 337.50     | 411.00     | 335.00     | 336.50       | 337.00    | 319.00        | 290.00       | 364.00        | 376.00      | 329.00        |
| Drafter                                                                                   | 401.13       | 386.00                  | 335.50     | 410.50     | 482.00     | 431.00     | 394.00       | 381.00    | 414.00        | 367.50       | 457.00        | 406.00      | 349.00        |
| Elect. Tech.                                                                              | 456.13       | 429.50                  | 450.00     | 486.50     | 518.50     | 408.00     | 491.00       | 430.00    | 451.50        | 445.00       | 507.00        | 411.00      | 445.50        |
| Reg. Nurse                                                                                | 444.10       | 424.50                  | 447.50     | 424.50     | 508.50     | 460.00     | 444.50       | 412.00    | 429.50        | 429.50       | 460.50        | -           | -             |
| <b>Office -wkly</b>                                                                       |              |                         |            |            |            |            |              |           |               |              |               |             |               |
| Secretary                                                                                 | 345.33       | 303.00                  | 344.00     | 337.00     | 417.00     | 371.00     | 330.50       | 349.50    | 327.00        | 311.00       | 352.00        | 371.00      | 331.00        |
| Stenographer                                                                              | 341.55       | 308.50                  | 386.50     | 347.50     | 373.50     | 328.50     | 294.50       | 327.50    | 310.50        | 307.00       | -             | 368.00      | 405.00        |
| Typist                                                                                    | 251.67       | 237.00                  | 223.50     | 241.50     | 242.50     | 256.00     | 251.50       | 244.00    | 226.00        | 230.05       | 271.00        | 349.00      | 248.00        |
| File Clerk                                                                                | 212.82       | 200.50                  | 197.00     | 200.50     | 203.00     | 220.50     | 231.00       | 198.00    | 198.50        | 188.00       | 250.50        | 266.00      | 201.00        |
| Messenger                                                                                 | 226.38       | 186.50                  | 209.50     | 225.50     | 260.50     | 215.50     | 216.00       | 240.00    | 224.50        | 214.50       | 257.50        | 236.50      | 230.00        |
| Receptionist                                                                              | 238.67       | 229.50                  | 223.00     | 246.00     | 245.00     | 250.50     | 237.50       | 238.00    | 237.00        | 222.50       | 256.50        | 244.50      | 234.00        |
| Order Clerk                                                                               | 281.71       | 272.50                  | 266.50     | 281.00     | 311.50     | 279.50     | 262.50       | 274.00    | 302.00        | 273.50       | 310.50        | 295.50      | 251.50        |
| Acct. Clerk                                                                               | 281.13       | 267.50                  | 276.00     | 282.50     | 286.50     | 293.50     | 269.50       | 283.50    | 265.50        | 267.00       | 316.50        | 296.00      | 269.50        |
| Payroll Clerk                                                                             | 296.25       | 279.50                  | 272.50     | 298.50     | 320.50     | 325.50     | 286.00       | 295.00    | 290.50        | 285.00       | 323.50        | 311.50      | 267.00        |
| Key Entry Op.                                                                             | 263.46       | 250.00                  | 256.00     | 265.00     | 273.50     | 276.00     | 269.00       | 253.50    | 259.00        | 236.50       | 308.00        | 270.00      | 237.00        |



# The Job Market

## THE PROFESSIONAL AND SCIENTIFIC INSTRUMENTS MANUFACTURING INDUSTRY

By B.J. Jones

The Measuring, Analyzing, and Controlling Instruments; Photographic, Medical, and Optical Goods; and Watches and Clocks industries include establishments engaged in the manufacturing of instruments (including professional and scientific) for measuring, testing, analyzing and controlling, and their associated sensors and accessories; optical instruments and lenses; surveying and drafting instruments; surgical, medical, and dental instruments; equipment and supplies; ophthalmic goods; photographic equipment and supplies; and watches and clocks. <sup>1/</sup> It is divided into seven sections: Engineering, Laboratory, Scientific, and Research Instruments; Measuring and Controlling Instruments; Optical Instruments and Lenses; Surgical, Medical, and Dental Instruments; Ophthalmic Goods; Photographic Equipment and Supplies; and Watches and Clocks. Approximately 34 percent of the Industry employment is classified as Measuring and Controlling Instruments; 25 percent Surgical, Medical, and Dental Instruments; 22 percent Engineering, Laboratory, Scientific, and Research Instruments; and 11 percent Photographic Equipment and Supplies. The remaining 8 percent is spread among the Ophthalmic Goods, Optical Instruments and Lenses, and Watches and Clocks.

Employment in the Professional and Scientific Instruments Industry in Minnesota inched upward between 1960 and 1970, increasing slightly more than 17 percent. Then from 1970 to 1980, employment growth rate soared by 71 percent. However, the unfavorable business climate of the early 1980's has resulted in a reduction of employment in this industry of 5.7 percent. In 1982, there were approximately 210 Professional and Scientific Instruments manufacturing establishments in Minnesota employing 26,100 workers. Approximately 88 percent of these workers were employed in the Minneapolis-St. Paul Metropolitan area.

Occupational staffing patterns for the Professional and Scientific Instruments Industry, as shown on Table I, point out that nearly 90 percent of the workers fall into four broad occupational categories; namely, Operatives, Professional and Technical, Craft Workers, and Clerical Workers. Operatives comprise the largest proportion (34.8 percent) of the workers in this industry. This ratio has held steady from 1970 to 1978, but is expected to increase its share of the total by 1985 to 36.5 percent. The number of Operatives increased by 44.1 percent from 1970 to 1978, and employment of Operatives is expected to rise another 35.6 percent by 1985. Comparatively, total employment in this industry rose 44.7 percent from 1970 to 1978 and is projected to climb another 29.2 percent by 1985. The largest single occupation in this category is Assemblers with nearly 3900 workers or 47.5 percent of the Operatives. Other major Operative occupations are Checkers and Examiners (10.0 percent), Packers and Wrappers (4.1 percent), and Soderers (3.4 percent).

Although the number of Professional and Technical Workers is increasing, there appears to be a downward trend in their composition of the industry employment. Between 1970 and 1978 the number of Professional and Technical Workers rose by 40.3 percent compared with 44.7 percent for the industry, and is expected to rise another 18.2 percent by 1985 compared with a projected 29.2 percent for the industry.

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<sup>1/</sup> For convenience, this Industry will be referred to as the Professional and Scientific Instruments Industry in this article.

Engineers comprise 30.2 percent of the Professional and Technical employees in this industry, with 12.8 percent employed as Electrical Engineers and 9.8 percent as Industrial Engineers. Some of the other significant professional and technical occupations are Electrical and Electronic Technicians (8.2 percent), Accountants (7.2 percent) and Drafters (7.0 percent). All of these occupations are expected to increase in absolute number by 1985, despite the downward trend in the proportion of Professional and Technical Workers in this industry.

The third largest group of workers in the Professional and Scientific Instrument Industry is Craft Workers. Comprising 17.7 percent of the Workers, the major occupations are Opticians, Lense Grinders and Polishers (30.4 percent), Blue Collar Worker Supervisors (18.3 percent), Heavy Equipment Mechanics (8.5 percent), Tool and Diemakers (7.4 percent), and Dental Laboratory Technicians (6.1 percent).

Within the Clerical sector, the major occupations are General Secretaries (30.8 percent), Bookkeepers (7.6 percent), and Stock Clerks (7.5 percent). The number of Clerical Workers in the Professional and Scientific Instrument Industry is expected to increase at a faster pace (38.1 percent) than the Industry as a whole from 1978 to 1985.

Workers in the remaining five broad categories constitute 12 percent of the industry's total employment. Among the Managerial Workers, Miscellaneous Managers (79.6 percent) and Buyers (17.9 percent) dominate. Virtually, all of the workers in the Sales Occupations are classified as Miscellaneous Sales Workers.

Laborers, who represent less than two percent of the total industry employment, fall basically into two groups; Stock Handlers (36.0 percent) and Freight and Material Handlers (28.8 percent). And finally, Janitors (73.6 percent) are the only significant occupation within the Service Worker category.

Overall, the employment outlook for this industrial sector should continue to be good through the 1980's. The greatest number of job opportunities are expected to be for Operatives, Professional, and Craft Workers.

Table 1

| Occupational Staffing Patterns For the Professional<br>and Scientific Instruments Industry |                     |      |      |
|--------------------------------------------------------------------------------------------|---------------------|------|------|
| Occupational Groups                                                                        | Percent of Industry |      |      |
|                                                                                            | 1970                | 1978 | 1985 |
| Professional, Technical, & Kindred                                                         | 21.4                | 20.8 | 19.0 |
| Managers, Officials, & Proprietors                                                         | 7.2                 | 7.6  | 7.0  |
| Sales                                                                                      | 1.5                 | 1.7  | 1.6  |
| Clerical                                                                                   | 14.9                | 14.0 | 15.0 |
| Craft & Kindred                                                                            | 16.0                | 17.7 | 17.7 |
| Operatives                                                                                 | 34.9                | 34.8 | 36.5 |
| Service                                                                                    | 2.0                 | 1.6  | 1.4  |
| Laborers except Farm                                                                       | 2.0                 | 1.7  | 1.8  |
| Farm Laborers                                                                              | 0.0                 | 0.0  | 0.0  |

# SUPPLY/DEMAND FOR SPECIFIC OCCUPATIONS, JANUARY, 1984<sup>1/</sup>

By S. Hamper

## MINNESOTA

Shortage Occupations: electrical engineers, commissioned sales persons#, electronic technicians, highly skilled clerical workers#, maintenance mechanics

Surplus Occupations: teachers, retail sales clerks#, general clerical workers, waiters/waitresses, machinists#, construction workers, truck drivers#, factory workers#, laborers#

## CENTRAL MINNESOTA

Shortage Occupations: commissioned sales persons#, skilled diesel and heavy equipment mechanics, experienced welders (especially aluminum welding)

Surplus Occupations: computer operators, registered nurses, retail sales clerks#, office clerical workers, assembly workers, laborers#

## MINNEAPOLIS-ST. PAUL

Shortage Occupations: electrical engineers, electronic technicians, highly skilled clerical workers#, maintenance mechanics

Surplus Occupations: teachers, full-time food service workers, machinists#, factory assemblers#, packaging and material movement handlers, laborers#

## NORTHEASTERN MINNESOTA

Shortage Occupations: none

Surplus Occupations: entry-level managers#, teachers#, social workers#, office clerks#, typists, bookkeepers#, sales clerks#, waiters/waitresses#, cooks#, maids#, food production workers#, machinists#, welders#, heavy equipment operators#, maintenance mechanics#, auto-diesel mechanics#, truck drivers#, carpenters#, painters#, bricklayers#, millwrights#, pipefitters#, electricians#, mining crafts#, laborers: construction, mining, and general#

## NORTHWESTERN MINNESOTA

Shortage Occupations: commissioned sales persons#, computer programmers, live-in companions#, diesel and heavy equipment mechanics

Surplus Occupations: clerical workers, waiters/waitresses, construction workers, welders#, truck drivers, laborers#



## SOUTHERN MINNESOTA

Shortage Occupations: electrical engineers#, mechanical and electrical drafters, secretaries with shorthand, over-the-road truck drivers

Surplus Occupations: management trainees, elementary teachers, clerical workers#, construction workers, factory workers, general laborers#

1/ Shortage occupations are those that are difficult to fill or go unfilled due to the lack of qualified applicants. Surplus occupations are those in which the number of qualified applicants greatly exceeds the number of openings.

# This occupation has been listed as a shortage or surplus occupation in at least two out of the last three quarters of the Review.

# Feature Article

## 1984 ECONOMIC OUTLOOK

By R. Pinola\*

### I. 1983 in Retrospect

Contrary to dire predictions by many analysts, the national economy exhibited substantial improvement in 1983. Despite a stagnant first quarter, real Gross National Product (RGNP) for the year grew by roughly 3.4 percent, close to our year-ago forecast of 3.5 percent. The moderation in producer and consumer price increases was also more than most forecasters had predicted. Although employment for the year grew more slowly than we had expected, this was largely due to sluggish conditions in the first quarter and better than average increases in productivity. <sup>1/</sup>

On the expenditure side, all major components except residential fixed investment behaved pretty much as we expected. Preliminary estimates by the U.S. Department of Commerce showed personal consumption expenditures growing by 4.2 percent, nonresidential fixed investment rising by 1.1 percent, and government purchases of goods and services increasing by a scant 0.5 percent. Meanwhile, the growth in residential fixed investment was a hefty 39.6 percent, considerably higher than predicted by most forecasters, including ourselves.

At the State level, Minnesota employment growth was sluggish until well into the third quarter. Both total and non-farm payroll employment in the State did not rise above the comparable month of a year earlier until August and, as a result, average annual employment for the entire year was basically unchanged from 1982, falling substantially below our forecast. However, by year end, total and non-farm payroll employment in Minnesota was up 5.3 percent and 3.0 percent, respectively, over December 1982 levels.

In tandem with the resurgence in employment after mid-year, both total and non-farm personal income in Minnesota showed healthy growth, outpacing that of the Nation in the third quarter. Also on the plus side, the Consumer Price Index for the Minneapolis-St. Paul SMSA rose by only 2.1 percent compared to a 3.2 percent increase nationally. <sup>2/</sup>

Perhaps the most welcome news for State policymakers was the significant decline in the unemployment insurance claim load. Weeks claimed in the regular program began a substantial decline in mid-March, fell below both the 1980 and 1982 level in mid-April, and the 1981 level by mid-June. By mid-October, weeks claimed in the regular program were less than half of the comparable 1982 period. Even more noteworthy was the decline in weeks claimed in the Manufacturing sector, with the October count less than 25 percent of the January level.

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<sup>1/</sup> Employers were also more inclined to increase hours worked per week rather than hire new workers.

<sup>2/</sup> Our calculations are based on annuage average changes in the CPI in contrast to those based on an over-the-year change for a particular month. Our method is more reflective of overall trend.

\*This article was prepared by R. Pinola, Director Research and Statistical Services Office of the Minnesota Department of Economic Security.

As the year drew to a close, the potential for continued growth at the national level was reflected in reported consumer and producer spending plans. Inasmuch as the fortunes of the State are largely dictated by national economic conditions, Minnesotans can expect to share in this growth.

## II. Issues and Problems

### The Federal Deficit

Over the years we have observed that the use of various elixirs to provide remedies for every form of economic dislocation has obscured our view of basic economic problems. Last year, we argued that while the long overdue focus on the Federal deficit and monetary ease was welcome, it was inclined to be misdirected and ill-timed. Instead of joining the chorus of dire predictions of credit crunches and the crowding of investment capital, we argued that a more realistic view in 1983 should focus on the huge gap between potential and actual GNP and widespread excess capacity in the system. With most manufacturers operating below 70 percent of capacity and over \$250 billion being massaged in the money market instead of new plant and equipment, we suggested that much of the rhetoric on the Federal deficit was misplaced. <sup>3/</sup> As it turned out, interest rates actually fell, private investment was not crowded out, and price inflation was at a ten-year low.

The notion that the Federal deficit poses a threat to economic recovery has received widespread attention. Most of the discussion has centered on two arguments; namely, that the deficit has led to an over-valued dollar and that it generates a shortage of capital and high interest rates. With respect to the first argument it is further posited that our merchandise trade deficit and poor export performance is directly attributable to the budget deficit and reduces the amount of available capital for private investment, thereby deterring recovery.

Considering the argument of the over-valued dollar, it is debatable whether it is as much the result of the deficit as a reflection of weak currencies of over-inflated economies searching for a safe harbor. There is also the question of how much our sluggish export sales are due to an over-valued dollar as opposed to the world-wide recession, combined with sticky production costs at home and the widespread diffusion of advanced technology abroad. As for production costs, it should be noted that from 1972 through 1982, output-per-manhour in the United States remained relatively flat (even declined in some years) in many key industries while wage rates and other costs continued to rise. Hence, rising production costs, together

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<sup>3/</sup> We feel it is misplaced because in the fourth quarter of 1982 manufacturers' plant utilization rates averaged only 64 percent of preferred utilization and actual GNP was 10.7 percent or \$178.1 billions of 1972 dollars short of potential GNP.



with the diffusion of advanced technology abroad, effectively reduced our competitive edge in the international market. <sup>4/</sup>

With regard to whether the Federal deficit creates a shortage of capital, thus inhibiting recovery, it may be useful to raise two questions. First, if the Federal Reserve supports the bond market, can there be a shortage of capital caused by the deficit? Secondly, if the system is already operating below capacity, is the public sector really competing with the private sector for capital?

The first question is easily dispensed with since the answer is implicit in the action of the Federal Reserve. In regard to the second question, we may observe that even in a full employed economy, the real problem is not the unavailability or cost of capital to business, but the higher costs of financing the public debt and danger of inflation. At full employment, business not only generates much of its own investment funds through retained earnings, but the real cost of capital is not a pressing problem. On the other hand, at less than full employment, the firm may operate between 65 and 75 percent of capacity and either earn negative returns or barely break even, thus making borrowing at any interest rate penurious. Experience shows that as output expands to 80, 85, and 90 percent of capacity, profits grow very quickly, retained earnings pile up, and the interest rate on borrowed capital becomes academic. <sup>5/</sup>

#### Coping with Structural Change

Another popular topic of interest involves assaying the effects of and forecasting structural change. All too often, measuring structural change and its effects is grossly inaccurate and exaggerated. For example, over the past two years estimates of the number of workers dislocated by structural change has varied from 50,000 to 2,000,000. Clearly, what is needed is a better conceptual framework for defining and measuring structural change and its effects. Otherwise policies to address problems engendered by structural change are bound to be misdirected and operate at cross-purposes.

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<sup>4/</sup> It should also be noted that in 11 of the past 13 years, the United States has experienced a deficit in merchandise trade. In 1977 and 1978, when the Federal deficit was only a fraction of that in 1983, our deficit in the merchandise trade account was 1.6 percent of GNP, not much different from the 1.8 percent of GNP in 1983. As in 1983, the U.S. economy was exhibiting strong growth in 1977 and 1978 which, as demonstrated historically, causes imports to rise faster than exports. This is not to say that the over-valued dollar has no bearing on our merchandise trade balance, only to suggest that it has been exaggerated in recent discussions and that tying it primarily to the Federal deficit in 1983 over-simplifies the problem.

<sup>5/</sup> We wish to add, however, that the interest rate in the 1970s primarily became of concern to many businesses only because they had unwisely and unnecessarily leveraged much of their expansion and acquisitions by using debt capital. Part of the blame for this leveraging rests with government and the tax code, but equally to blame are the corporate executives who eagerly accepted the nostrums of financial advisors weaned on the new-found wisdom of creative finance.

It is obvious that many of the job separations due to the recession are being treated as jobs losses due to structural change when the job separations are due to a decline in aggregate demand and, therefore, there is little sense in directing massive programs to deal with structural displacement. Admittedly, there is a fine line between structural and cyclical unemployment, but it seems easier to separate the two when the economy is operating at full employment because, at that time, long-term unemployment can more readily be linked to structural problems. Moreover, it is easier to accommodate structural change when the economy is at or near full employment and to formulate programs for displaced workers with a higher degree of success. However, until better concepts and methods are devised for identifying and gauging the nature and incidence of structural displacement, it is doubtful whether effective programs to deal with the problem can be developed.

One caveat that requires emphasis is the limitation that applies to attempts to promote faster or preferred growth through policies that are directed to a predetermined distribution of industrial employment. Twenty years ago it was fashionable to develop models of planned industrial growth that would resolve many of the problems that were presumed to result from unplanned growth. At the time, the Netherlands was held out by many developmental economists and planners as a model for controlled industrialization and growth in order to ward off many of the problems of structural change. Today, very few economists would regard the Netherlands experience as any more successful than that of countries where the direction of economic and industrial activity was not planned. A similar condition belies the effectiveness of the British Investment Board which was created to direct investments into industries and areas to promote orderly and sustained growth. In Austria and selected other European nations incomes policies were employed in the 1960s and 1970s to control inflation, promote orderly growth, and secure an equitable distribution of income. However, experience has indicated that success is easier to achieve in theory than in practice. More recently, considerable effort in the United States has been directed to promoting an industrial policy focused largely on high technology to overcome sluggish growth, reduce unemployment, and deal with structural change. Much of this effort has failed to consider the realities of the economic system and the market structure of jobs.<sup>6/</sup>

### III. The 1984 Forecast

As before, we first offer a set of assumptions on which our forecasts are based so that readers can make their own evaluation as to whether the forecasts appear reasonable. We hasten to add that all assumptions, regardless of who makes them, are reflective of how the forecaster perceives key institutions and economic agents reacting to an environment that is susceptible to change and which they cannot fully comprehend or control.

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<sup>6/</sup> On the employment side, see our article, "High Technology: Myth and Reality", in the May 1983 issue of our Review of Labor and Economic Conditions. For another view, see the article by Riche, Hecker, and Burgan in the November 1983 issue of the Monthly Labor Review, published by the Bureau of Labor Statistics, U.S. Department of Labor.

## Fiscal and Monetary Policy

Although the Federal deficit will again approach \$200 billion in 1984, there is still considerable slack in the economy to avoid any serious threat of inflation. Moreover, an increase in output in recovery periods is usually accompanied by increases in productivity which also dampens inflationary pressures. Given continued improvement in corporate cash flow, and assuming the Federal Reserve will expand the money supply to accommodate an expansion in economic activity, there seems to be no reason to fear a shortage of capital. Without a serious inflationary threat, interest rates should also remain largely unchanged.

Although we are not inclined to put too much faith in Presidential elections as an economic elixir, we have found it interesting that, except for 1980, every Presidential election year produced an expansion in economic activity. In fact, the expansions were fairly strong in most of these election years. It may be that Presidential elections are conducive to a general psychology of spending based on the promised bounties of tomorrow. Whatever, this historical record can offer an added dimension to all forecasts.

## Disposable Income and Spending

Preliminary estimates by the U.S. Department of Commerce showed disposable personal income in 1983 rising by 7.3 percent. After adjustment by the Consumer Price Index, disposable personal income exhibited better growth than in any year since 1923, except for 1978. As economic activity and employment expands, both labor and property income will continue to grow. We expect this growth to at least match that of 1983.

On the expenditure side, consumer outlays should pretty well follow last year's growth, while business investment and Federal government spending are projected to rise at a faster pace than in 1983. With tax collections moving in tandem with increased economic activity, State and local government expenditures should also show some modest increases. Aggregate spending will not, however, fully match output due to the deficit in our merchandise trade account. However, in the context of aggregate economic activity, this has a relatively small effect on total output.

## Threat of Inflation

Despite a Federal deficit approaching \$200 billion, there is sufficient excess capacity in the system to ward off any large scale increase in prices. While many analysts decry the assumed effects of the over-valued dollar on our export trade, it can be viewed as a blessing in disguise since it means cheaper imports of raw materials and components for fabrication in the United States. And, though our farmers and manufacturers are hurt by weak exports, the American consumer gains by lower prices at the supermarket. In short, given the over-valued dollar and excess capacity in the system, together with productivity increases from expansions in output, it seems that any serious threat of run-away inflation can be avoided even if Federal Reserve expands the money supply to accommodate economic growth and support deficit financing. With the threat of inflation muted, interest rates should remain at or near their current load.



## Labor Force, Productivity, and Hours Worked

As we noted earlier, although real Gross National Product grew by 3.4 percent in 1983, employment failed to grow at the same pace because both productivity per man-hour and hours worked rose by more than expected. This also explains why unemployment did not fall as much as expected despite the modest growth (1.3 percent) in the labor force. At year end, however, hours worked per week were at a point where only nominal increases could be expected. Thus, a key to new hires and employment increases will depend heavily on productivity. Empirical studies and modern microeconomic theory indicate that marginal and average variable costs in large-scale firms tend to decline over a wide output range up to capacity. However, there is still considerable disagreement as to what represents capacity. In this respect, the economist's view of capacity is not that of the engineer's since it is based on the behavior of cost curves. Our own inclination is to regard the economic plant capacity as falling somewhere around 90 to 92 percent of that which is set by engineers. This view is largely predicated on the fact that labor is not of uniform quality and that unit costs begin to rise sharply before engineering capacity is reached. <sup>7/</sup>

Given the above observations, we envisage productivity increases to be more difficult to achieve as output approaches 90 to 92 percent of capacity. Therefore, while employment is not likely to grow in unison with output at lower levels of capacity, it can be expected to match output growth once firms begin to approach the most economic scale of operations. We do not anticipate many industries operating at 90 to 92 percent of capacity in 1984, hence employment will grow at a slower pace than output.

Although the labor force normally expands faster as economic conditions improve, demographic trends for the 1980s point to slower growth in the number of job seekers than in the 1970s. In 1983, the labor force grew by slightly under 1.3 percent. We anticipate a similar increase in 1984.

## Forecast of U.S. Gross National Product, Employment, and Unemployment

Tables 1 and 2 provide forecasts of income, aggregate demand, and labor force behavior for 1984. The forecasts assume continued improvement in the economy with output and employment rising, unemployment declining, and inflation edging a bit above the 1983 pace. We also expect our merchandise trade deficit to prevail, albeit at a reduced level, and the dollar to remain fairly strong in foreign exchange markets.

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<sup>7/</sup> It also derives from the fact that unit costs for the existing plant at, say, 90 percent of engineering capacity are likely to be higher than for a larger plant, technology and input prices remaining constant.

Table 1. Forecast Changes in GNP and Components, 1984/1983

| <u>Component</u>                                 | <u>Estimated<br/>% Change</u> |
|--------------------------------------------------|-------------------------------|
| A. Income and Consumption                        |                               |
| 1. Disposable Income                             | 8.2                           |
| 2. Consumption Effect of Change in Savings Rate  | nil                           |
| 3. Consumption Effect of Installment Credit      | 0.5                           |
| 4. Total Change in Personal Consumption          | 8.7                           |
| 5. Price-Adjusted Change in Personal Consumption | 4.2                           |
| 6. Net Contribution to Change in GNP             | 2.7                           |
| B. Gross Private Domestic Investment (GPDI)      |                               |
| 1. Nonresidential Fixed Investment               | 15.0                          |
| 2. Residential Fixed Investment                  | 10.0                          |
| 3. Impact of Change in Business Inventories      | 8.0                           |
| 4. Total Change in GPDI                          | 13.5                          |
| 5. Price-Adjusted Change in GPDI                 | 8.0                           |
| 6. Net Contribution to Change in GNP             | 1.2                           |
| C. Government Purchases of Goods & Services      |                               |
| 1. Federal                                       | 8.5                           |
| 2. State and Local                               | 6.5                           |
| 3. Total Change in Government Purchases          | 7.3                           |
| 4. Price-Adjusted Change in Government Purchases | 2.0                           |
| 5. Net Contribution to Change in GNP             | 0.5                           |
| D. 1984/1983 Change in Real GNP                  | 4.4                           |

Table 2. Forecasts of U.S. Labor Market Conditions

| <u>Item</u>              | <u>1983<br/>Average</u> | <u>Estimated<br/>% Change</u> | <u>Estimated<br/>1984 Average</u> |
|--------------------------|-------------------------|-------------------------------|-----------------------------------|
| 1. Output Per Man-Hour   | -----                   | 1.0                           | -----                             |
| 2. Hours Worked Per Week | -----                   | nil                           | -----                             |
| 3. Civilian Labor Force  | 111.6 mil.              | 1.3                           | 113.1 mil.                        |
| 4. Civilian Employment   | 100.8 mil.              | 3.4                           | 104.2 mil.                        |
| 5. Unemployment          | 10.8 mil.               |                               | 8.9 mil.                          |
| 6. Unemployment Rate     | 9.7%                    |                               | 7.9%                              |

## The Minnesota Forecast

As we noted in our year-ago forecast, Minnesota nonfarm payrolls and employment showed greater swings in the 1980-81 business cycle than did the Nation. This reversal of earlier post-World War II experience signalled a new twist in the State's economic fortunes. We also noted that the 1980-81 reversal of earlier experience was primarily due to payroll swings in the Manufacturing and Construction industries.

Although the 1982 contraction was more pervasive than the 1980-81 downturn, it is too early to gauge the overall swings in the current cycle. In Minnesota, what probably makes the Manufacturing sector cyclically sensitive is the rising importance of the durable goods industries which are susceptible to wide swings in capital goods investment. Such swings are reflective of the accelerator principle which, in the jargon of macro-economic theory, is the tail that wags the proverbial economic dog. Inasmuch as Minnesota's durable goods manufacturing activity is heavily oriented toward capital goods, one can assume the accelerator principle to play an important role in manufacturing payroll behavior. Moreover, since the Manufacturing sector is a large generator of income, its health directly affects many tertiary industries such as Trade, Services, and the Finance, Insurance, and Real Estate sectors. In short, it is unfortunate that the Manufacturing sector has recently been written off as viable growth industry because careful study will show that it is an important link to the overall health of the economy and contributes to the development of many jobs that would not otherwise exist.

Looking to the State's economic climate in 1984, we need only to recognize the close linkage that exists with the national economy. We have already observed the linkage that exists between our durable goods manufacturing activity and capital goods investment. The fact that price-adjusted new plant and equipment expenditures are projected to rise by over 9.0 percent at the national level should augur well for the Minnesota producer goods industry. As noted earlier, the Trade, Services, and Finance, Insurance, and Real Estate industries can expect to benefit from higher manufacturing incomes and support services. Employment in Metal Mining is not expected to show any significant growth, whereas a disproportion of construction activity seems destined to occur in the Twin Cities metropolitan area. Table 3 summarizes labor market conditions that are expected to prevail in Minnesota in the current year.

Table 3. Forecast Minnesota Labor Market Conditions\*

| <u>Item</u>          | <u>1983<br/>Average<br/>(000s)</u> | <u>Estimated<br/>% Change</u> | <u>Estimated<br/>1984 Average<br/>(000s)</u> |
|----------------------|------------------------------------|-------------------------------|----------------------------------------------|
| 1. Labor Force       | 2174                               | 2.1*                          | 2220                                         |
| 2. Employment        | 1997                               | 4.0                           | 2077                                         |
| 3. Unemployment      | 177                                | -19.2                         | 143                                          |
| 4. Unemployment Rate | 8.1%                               | -21.0                         | 6.4%                                         |

\* Labor Force estimates for 1983 were revised in February based on BLS benchmarks. Hence, the forecast values also changed. These changes were made after publication of the earlier forecast.



# Brief Analysis Of Economic Conditions

## THE NATIONAL AND STATE ECONOMIES AT YEAR'S END

By B. Boyle

### NATION

Economic data for January indicate that the Nation's economy is now growing at a very fast pace. The economic news for January was somewhat surprising in that it had appeared in the fourth quarter that the economy was headed for a period of more moderate growth.

The employment and unemployment picture improved significantly in the period from September through January. Since September, seasonally adjusted total employment has risen by 1.3 million and even more important, industry employment, also seasonally adjusted has increased by slightly more than 1 million. Excluding the surge in September after the communications strike, the January rise of 287,000 in industry employment was the largest advance in seven months. Also significant in January was a very large gain of 103,000 in construction employment. Meanwhile, manufacturing employment, especially in durable goods, continued to record substantial increases.

Developments in other major economic indicators also suggested that the economy was very strong in January. Industrial production rose 1.1 percent in January after gains averaging 0.6 percent in the three previous months. Also, retail sales jumped by 2.2 percent in January, much stronger than expected following the very weak 0.1 percent increase in December. Perhaps even more significant, housing starts swelled by 15 percent in January to their highest since the boom in 1978. Meanwhile, personal income and personal spending continued to show substantial gains.

### STATE

The Minnesota economy, like that of the Nation, appeared to be quite healthy in January. The unemployment rate rose much less than it normally does in January while total employment fell at a lower rate than usual in January. Also like the United States, the gains in nonfarm payroll employment have been stronger in the past four or five months than in earlier months of the recovery.

The State's seasonally unadjusted unemployment rate rose only 0.1 of a percentage point to 7.8 percent in January, in contrast to the average December to January increase of 0.8 of a percentage point over the past thirteen years. Also, unadjusted total employment fell only 1.2 percent in January, well below the average January drop of 2.7 percent. Moreover, the over-the-year rise of 4.7 percent in total employment was the largest since the 4.8 percent in December 1978. The over-the-year gains in employment have been getting increasingly larger in each month since August. Meanwhile, seasonally adjusted nonfarm payroll employment rose by a very strong 14,500 in January, the largest one month gain since the upturn began in January 1983. Since August, seasonally adjusted payroll employment has increased by an average of 8,400 per month, considerably above the average monthly gain of 4,600 during the first eight months of the recovery. The recent growth in payroll employment in Minnesota has been concentrated in the trade and services industries whereas in the Nation the largest employment increases over the past four months were in manufacturing.

# Forecasts

## FORECASTS OF GNP AND MINNESOTA PAYROLL EMPLOYMENT

By C. Cline

In all cases the forecasts on this page are computed using revised as opposed to preliminary estimates. However for the forecasts made in this quarter of each year, the revisions in the data for employment are more extensive, going back as far as three to six years. This is due to "benchmarking" the survey estimates to actual figures in the unemployment insurance fund administrative records. This can produce sizable revisions in the underlying data and thus in the forecasts themselves.

It did this year. For example, the one-period ahead forecast of fourth quarter, 1983, wage and salary employment was 1,744.41 prior to benchmarked data. Afterwards the forecast was 1,756.01. Hence the reader should not be surprised to find that the forecasts in this issue differ appreciably from those for the same quarters in the previous issue of the Review.

The Mining industry experienced a significant drop in employment in the third quarter of 1982 when employment fell from 11,844 to 6,947. This has persisted to the present. Similar sharp reductions have occurred before but have not persisted as long. As a result our forecasts have consistently overestimated the actual values. For the near term, readers might use a correction of -1.1 for one-period ahead, -2.2 for two-period ahead, and -3.0 for three through eight-period ahead forecasts for Mining.

| Quarter  | Real GNP (Billions of 1972 Dollars) | MINNESOTA PAYROLL EMPLOYMENT, BY QUARTER<br>(In Thousands) |        |                       |               |                                                    |                            |                                   |          |            |
|----------|-------------------------------------|------------------------------------------------------------|--------|-----------------------|---------------|----------------------------------------------------|----------------------------|-----------------------------------|----------|------------|
|          |                                     | Total Nonagricultural Wage & Salary                        | Mining | Contract Construction | Manufacturing | Transportation, Communications, & Public Utilities | Retail and Wholesale Trade | Finance, Insurance, & Real Estate | Services | Government |
| CURRENT  |                                     |                                                            |        |                       |               |                                                    |                            |                                   |          |            |
| 1983-IV  | 1571.90                             | 1759.26                                                    | 7.33   | 66.51                 | 351.94        | 95.24                                              | 440.11                     | 101.99                            | 400.93   | 295.21     |
| FORECAST |                                     |                                                            |        |                       |               |                                                    |                            |                                   |          |            |
| 1984-I   | 1588.62                             | 1725.71                                                    | 7.47   | 50.50                 | 345.87        | 94.05                                              | 428.33                     | 102.50                            | 398.12   | 295.64     |
| 1984-II  | 1606.86                             | 1795.70                                                    | 9.39   | 63.97                 | 354.05        | 95.54                                              | 449.10                     | 105.11                            | 413.27   | 298.04     |
| 1984-III | 1628.36                             | 1821.51                                                    | 9.94   | 75.51                 | 370.99        | 95.47                                              | 453.02                     | 106.98                            | 418.91   | 276.01     |
| 1984-IV  | 1647.38                             | 1851.89                                                    | 9.51   | 71.74                 | 366.50        | 99.00                                              | 460.22                     | 106.98                            | 425.02   | 300.36     |
| 1985-I   | 1666.48                             | 1813.62                                                    | 9.12   | 54.31                 | 362.22        | 96.98                                              | 449.16                     | 107.46                            | 422.85   | 301.59     |
| 1985-II  | 1684.11                             | 1884.96                                                    | 10.47  | 68.54                 | 370.13        | 99.14                                              | 470.59                     | 110.10                            | 439.63   | 303.50     |
| 1985-III | 1699.68                             | 1912.14                                                    | 10.76  | 80.42                 | 387.32        | 99.59                                              | 473.44                     | 111.94                            | 444.32   | 281.93     |
| 1985-IV  | 1716.07                             | 1939.36                                                    | 10.25  | 75.38                 | 381.74        | 102.73                                             | 481.07                     | 111.85                            | 451.39   | 304.26     |

### Notes

1. These forecasts are produced using the Vector Autoregression model developed for Research by Rao Aiyagari.
2. The concept of employment forecasted is that of Nonagricultural Wage and Salary employment. The count represents the number of jobs held since the data is generated from a survey of employer payroll records. Groups included in labor force employment, but excluded here are the self employed, domestics, unpaid family workers, employees of nonprofit institutions, and those government workers not covered by unemployment insurance.
3. Employment forecasts are seasonally unadjusted values. Real GNP is seasonally adjusted.
4. Forecasts of major industry employment do not sum to the forecast of total wage and salary employment. This is due to random error in the forecasted values.
5. There is great diversity in the accuracy of our forecasts among the major industry division. More information on their accuracy can be obtained from the author on request.

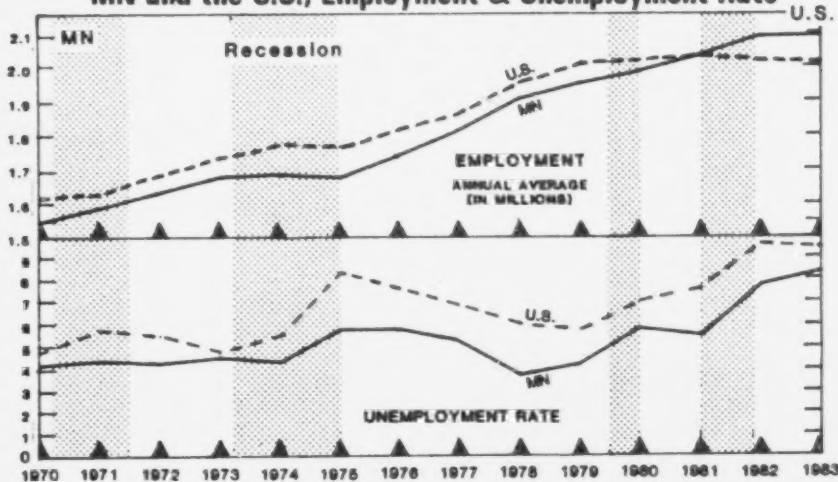
# Labor Force Statistics

| Labor Force Estimates | MINNESOTA<br>(Numbers in '000's) |          |          | UNITED STATES<br>(Numbers in '000,000's) |          |          |
|-----------------------|----------------------------------|----------|----------|------------------------------------------|----------|----------|
|                       | January<br>1984                  | Change   | From     | January<br>1984                          | Change   | From     |
|                       |                                  | Last Mo. | Year Ago |                                          | Last Mo. | Year Ago |
| Civilian Labor Force  | 2150.7                           | -24.5    | 39.5     | 111.0                                    | -0.8     | 1.2      |
| Employed              | 1983.9                           | -23.3    | 88.9     | 101.3                                    | -1.5     | 4.0      |
| Unemployed            | 166.8                            | -1.2     | -49.4    | 9.7                                      | 0.7      | -2.8     |
| Unemployment Rate     |                                  |          |          |                                          |          |          |
| Actual                | 7.8                              | 0.1      | -2.4     | 8.8                                      | 0.8      | -2.6     |
| Seasonally Adjusted   | n.a.                             | n.a.     | n.a.     | 8.0                                      | -0.2     | -2.4     |

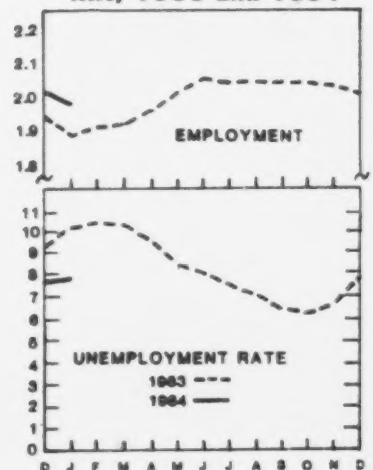
## Historical Labor Force Series

| Year | Minnesota<br>(Annual Average in '000's) |            |              |      | United States<br>(Annual Average in '000,000's) |            |              |      |
|------|-----------------------------------------|------------|--------------|------|-------------------------------------------------|------------|--------------|------|
|      | Labor Force                             | Employment | Unemployment |      | Labor Force                                     | Employment | Unemployment |      |
|      |                                         |            | Number       | Rate |                                                 |            | Number       | Rate |
| 1970 | 1625.0                                  | 1557.0     | 68.0         | 4.2  | 82.8                                            | 78.7       | 4.1          | 4.9  |
| 1971 | 1665.0                                  | 1593.0     | 73.0         | 4.4  | 84.4                                            | 79.4       | 5.0          | 5.9  |
| 1972 | 1709.0                                  | 1635.0     | 73.0         | 4.3  | 87.0                                            | 82.2       | 4.9          | 5.6  |
| 1973 | 1774.0                                  | 1694.0     | 80.0         | 4.5  | 89.4                                            | 85.1       | 4.4          | 4.9  |
| 1974 | 1779.0                                  | 1701.0     | 77.0         | 4.3  | 91.9                                            | 86.8       | 5.2          | 5.6  |
| 1975 | 1804.0                                  | 1697.0     | 107.0        | 5.9  | 93.8                                            | 85.8       | 7.9          | 8.5  |
| 1976 | 1849.0                                  | 1739.0     | 109.0        | 5.9  | 96.2                                            | 88.8       | 7.4          | 7.7  |
| 1977 | 1907.0                                  | 1809.0     | 97.0         | 5.1  | 99.0                                            | 92.0       | 7.0          | 7.1  |
| 1978 | 1979.0                                  | 1903.0     | 75.0         | 3.8  | 102.3                                           | 96.0       | 6.2          | 6.1  |
| 1979 | 2038.0                                  | 1953.0     | 85.0         | 4.2  | 105.0                                           | 98.8       | 6.1          | 5.8  |
| 1980 | 2109.0                                  | 1984.0     | 125.0        | 5.9  | 106.9                                           | 99.3       | 7.6          | 7.1  |
| 1981 | 2153.0                                  | 2034.0     | 119.0        | 5.5  | 108.7                                           | 100.4      | 8.3          | 7.6  |
| 1982 | 2166.0                                  | 1997.0     | 169.0        | 7.8  | 110.2                                           | 99.5       | 10.7         | 9.7  |

### MN and the U.S., Employment & Unemployment Rate



### MN, 1983 and 1984





# Labor Market Conditions

The table and graphs in this section describe the behavior of the market for labor services in terms of its quantity, price, and supply. The quantity of labor services, which is the number of employed persons, is classified by industry. The price of labor services is roughly indicated by the industry wage.

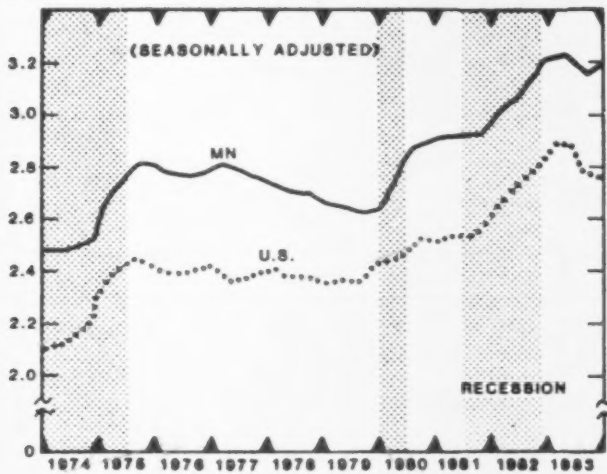
Unemployment estimates provide a qualified measure of excess labor supply. The degree to which persons participate in the labor market and the effectiveness of the market in utilizing labor services are indicated by Labor Force Estimates and by Other Rates of Labor Utilization.

| Labor Force<br>And Establishment Data                       | MINNESOTA<br>(Numbers in '000's)                                          |                        |          | UNITED STATES<br>(Numbers in '000's) |                        |          |
|-------------------------------------------------------------|---------------------------------------------------------------------------|------------------------|----------|--------------------------------------|------------------------|----------|
|                                                             | IV Qtr.<br>1983                                                           | Percent Change<br>From |          | IV Qtr.<br>1983                      | Percent Change<br>From |          |
|                                                             |                                                                           | Last Qtr               | Year Ago |                                      | Last Qtr               | Year Ago |
| <u>LABOR FORCE ESTIMATES</u>                                |                                                                           |                        |          |                                      |                        |          |
| Total Labor Force                                           | 2178.0                                                                    | -0.9                   | 1.1      | 111995                               | -1.1                   | 1.2      |
| Employment                                                  | 2028.3                                                                    | -0.8                   | 2.8      | 102826                               | -0.1                   | 3.5      |
| Nonagricultural                                             | n.a.                                                                      | n.a.                   | n.a.     | 99657                                | 0.6                    | 3.8      |
| Agricultural                                                | n.a.                                                                      | n.a.                   | n.a.     | 3170                                 | -18.4                  | -4.8     |
| Unemployment                                                | 149.7                                                                     | -2.3                   | -17.2    | 9168                                 | -11.1                  | -19.2    |
| By Reason - New Reentrants-%*                               | n.a.                                                                      | n.a.                   | n.a.     | 35.8                                 | 3.8                    | 12.2     |
| By Reason - Quit-%*                                         | n.a.                                                                      | n.a.                   | n.a.     | 9.0                                  | 18.4                   | 32.4     |
| By Reason - Lost-%*                                         | n.a.                                                                      | n.a.                   | n.a.     | 55.2                                 | -4.5                   | -10.1    |
| Unemployment Rates                                          |                                                                           |                        |          |                                      |                        |          |
| Actual                                                      | 6.9                                                                       | -1.4                   | -17.9    | 8.2                                  | -9.9                   | -20.4    |
| Seasonally Adjusted                                         | n.a.                                                                      | n.a.                   | n.a.     | 8.5                                  | -9.6                   | -19.8    |
| <u>OTHER RATES OF LABOR UTILIZATION</u>                     |                                                                           |                        |          |                                      |                        |          |
| Participation Rt (Labor Force/Population 16+)               | n.a.                                                                      | n.a.                   | n.a.     | 64.0                                 | -0.3                   | 0.0      |
| Full Employment Deficit - Percent of Workers <sup>1</sup> / | 2.9                                                                       | 3.0                    | 4.4      | 4.2                                  | 5.1                    | 6.3      |
| Manpower Utilization Rate <sup>2</sup> /                    | 83.3                                                                      | 0.7                    | 3.3      | 81.7                                 | 1.2                    | 3.8      |
| <u>NONAGRICULTURAL WAGE AND SALARIED POSITIONS</u>          |                                                                           |                        |          |                                      |                        |          |
| Employment*                                                 | 1728.4                                                                    | 1.3                    | 2.4      | 91381                                | 1.3                    | 2.9      |
| Mining                                                      | 7.4                                                                       | -14.0                  | 10.4     | 1047                                 | 2.4                    | -1.9     |
| Construction                                                | 62.4                                                                      | 1.0                    | 8.9      | 4089                                 | 2.0                    | 6.6      |
| Manufacturing                                               | 341.9                                                                     | 0.7                    | 1.7      | 19172                                | 2.0                    | 5.0      |
| Durables                                                    | 203.3                                                                     | 1.3                    | 2.4      | 11318                                | 2.7                    | 6.7      |
| Nondurables                                                 | 138.6                                                                     | -0.3                   | 0.6      | 7854                                 | 1.0                    | 2.7      |
| Trans., Comm., & Public Utilities                           | 93.9                                                                      | 3.5                    | -0.2     | 5023                                 | 5.0                    | 0.1      |
| Trade                                                       | 439.0                                                                     | 1.0                    | 3.0      | 20701                                | 0.6                    | 1.9      |
| Fin., Ins., & Real Estate                                   | 100.3                                                                     | 1.9                    | 2.3      | 5521                                 | 0.7                    | 3.0      |
| Services                                                    | 395.5                                                                     | 1.2                    | 3.6      | 20043                                | 1.0                    | 4.5      |
| Government                                                  | 288.0                                                                     | 2.1                    | 0.3      | 15785                                | 0.3                    | 0.1      |
| Average Weekly Hours*                                       |                                                                           |                        |          |                                      |                        |          |
| Mining                                                      | 36.3                                                                      | 6.0                    | -6.7     | 43.1                                 | 1.2                    | 2.9      |
| Construction                                                | 35.9                                                                      | -5.8                   | 2.6      | 36.8                                 | -3.2                   | 0.3      |
| Manufacturing                                               | 40.1                                                                      | 0.3                    | 2.3      | 40.6                                 | 0.5                    | 4.1      |
| Durables                                                    | 40.8                                                                      | 0.2                    | 2.3      | 41.2                                 | 0.5                    | 4.8      |
| Nondurables                                                 | 39.1                                                                      | -1.0                   | 2.4      | 39.7                                 | 0.3                    | 2.8      |
| Trans., Comm., & Public Utilities                           | 38.7                                                                      | 0.8                    | 2.4      | 39.4                                 | 0.5                    | 1.3      |
| Trade                                                       | 30.8                                                                      | 2.3                    | 3.7      | 32.1                                 | 0.9                    | 0.6      |
| Fin., Ins., & Real Estate                                   | n.a.                                                                      | n.a.                   | n.a.     | 36.1                                 | 0.0                    | -0.3     |
| Services                                                    | n.a.                                                                      | n.a.                   | n.a.     | 32.8                                 | 0.3                    | 0.6      |
| Average Hourly Wage                                         |                                                                           |                        |          |                                      |                        |          |
| Mining                                                      | 11.98                                                                     | -1.2                   | -8.8     | 11.40                                | 0.8                    | 3.6      |
| Construction                                                | 14.71                                                                     | -0.5                   | 2.2      | 11.98                                | 0.8                    | 1.1      |
| Manufacturing                                               | 9.68                                                                      | 1.5                    | 4.1      | 8.98                                 | 1.5                    | 4.2      |
| Durables                                                    | 9.80                                                                      | 0.7                    | 4.9      | 9.55                                 | 1.5                    | 4.0      |
| Nondurables                                                 | 9.52                                                                      | 2.4                    | 3.1      | 8.17                                 | 1.0                    | 3.7      |
| Trans., Comm., & Public Utilities                           | 11.16                                                                     | 1.3                    | 5.8      | 10.99                                | 1.6                    | 4.1      |
| Trade                                                       | 7.34                                                                      | 0.0                    | 4.6      | 6.57                                 | 1.1                    | 4.6      |
| Fin., Ins., & Real Estate                                   | n.a.                                                                      | n.a.                   | n.a.     | 7.42                                 | 1.8                    | 6.2      |
| Services                                                    | n.a.                                                                      | n.a.                   | n.a.     | 7.41                                 | 2.6                    | 4.7      |
| Estimates of Labor Turnover (Mfg. Only)                     | Estimates of Labor Turnover have been discontinued as of January 1, 1982. |                        |          |                                      |                        |          |

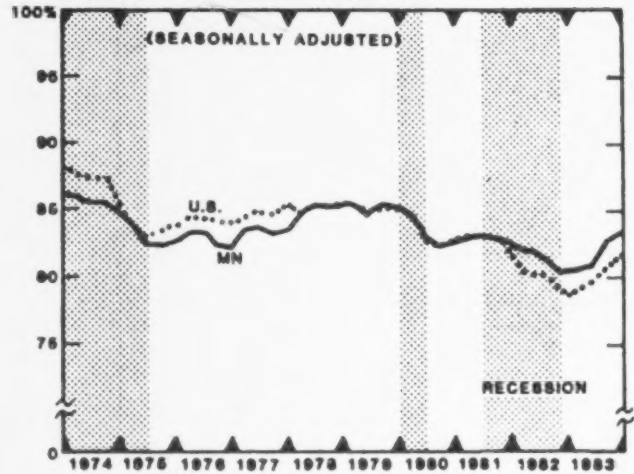
a/ Values are numerical values, not percent changes.

# Labor Market Conditions

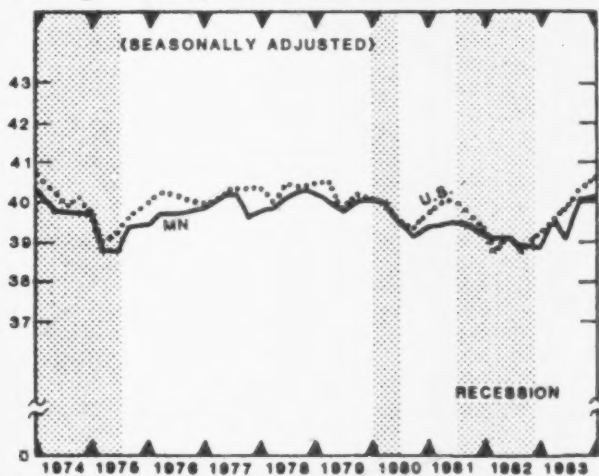
## Ratio of Service to Goods Producing Jobs



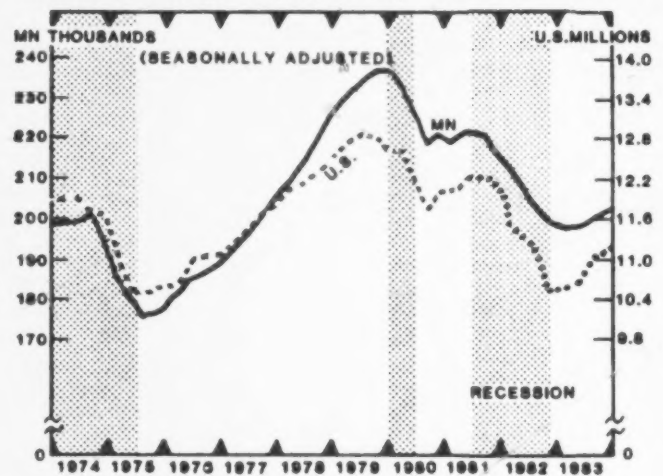
## Manpower Utilization Rate



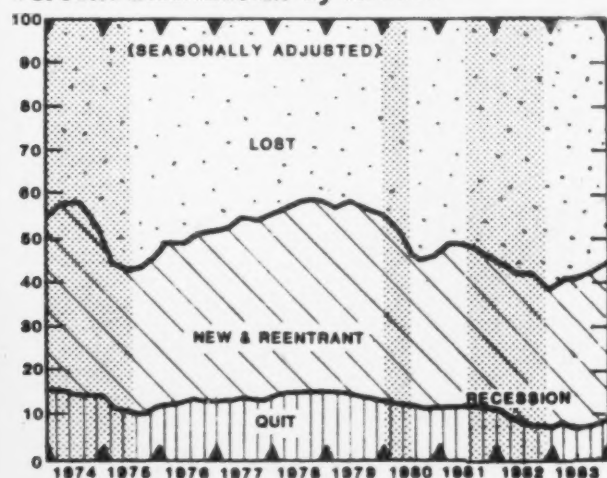
## Average Weekly Hours, Manufacturing



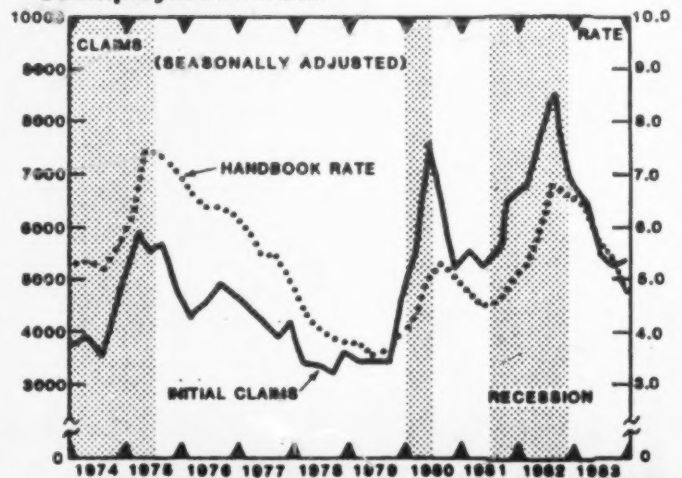
## Manufacturing Employment, Durable Goods



## U.S. Unemployment: Percent Distribution by Reason



## MN Weekly Initial Claims & Handbook Unemployment Rate<sup>1</sup>



# Labor Market Conditions

The Table below provides data on persons who file claims for unemployment compensation in Minnesota. Only those claiming benefits from the regular State program are represented, since data on the characteristics of Federal employees and veterans are not available, and data on those receiving benefits from

extended programs is reported only when those programs are in effect. If those receiving extended benefits were included they would distort the numerical comparisons over time, but would not substantially change the percentage distributions other than to increase the proportion of long-term unemployed.

| Persons Claiming<br>Benefits | Fourth Quarter 1983 |                     |             | January 1984 |                     |             | Percent<br>Long<br>Term |
|------------------------------|---------------------|---------------------|-------------|--------------|---------------------|-------------|-------------------------|
|                              | Number              | Percent Change From |             | Number       | Percent Change From |             |                         |
|                              |                     | Last<br>Qtr.        | Year<br>Ago |              | Month<br>Ago        | Year<br>Ago |                         |
| <u>By Age &amp; Sex</u>      |                     |                     |             |              |                     |             |                         |
| Male                         | 25,791              | 31.7                | -42.5       | 46,114       | 25.1                | -27.6       | 8.3                     |
| Under 45                     | 19,802              | 33.3                | -43.4       | 36,130       | 25.6                | -27.3       | 7.7                     |
| Under 25                     | 4,908               | 48.6                | -47.1       | 9,384        | 24.0                | -33.6       | 5.7                     |
| 25-34                        | 9,696               | 31.0                | -43.8       | 17,946       | 28.0                | -24.7       | 7.8                     |
| 35-44                        | 5,198               | 25.0                | -38.3       | 8,800        | 22.7                | -24.8       | 9.6                     |
| 45 and Over                  | 5,989               | 26.9                | -39.4       | 9,984        | 23.5                | -28.8       | 10.5                    |
| 45-54                        | 3,469               | 34.1                | -38.6       | 5,738        | 21.5                | -28.5       | 9.8                     |
| 55 and Over                  | 2,520               | 18.0                | -40.5       | 4,246        | 26.2                | -29.2       | 11.4                    |
| Female                       | 10,701              | -13.9               | -40.8       | 13,633       | 14.4                | -34.5       | 16.8                    |
| Under 45                     | 7,841               | -14.0               | -42.7       | 9,876        | 15.2                | -35.5       | 16.4                    |
| Under 25                     | 2,052               | -1.3                | -46.5       | 2,715        | 16.7                | -40.9       | 14.4                    |
| 25-34                        | 3,513               | -16.4               | -41.9       | 4,375        | 16.6                | -33.8       | 17.5                    |
| 35-44                        | 2,276               | -19.7               | -40.2       | 2,786        | 11.7                | -32.3       | 16.7                    |
| 45 and Over                  | 2,860               | -13.8               | -34.9       | 3,757        | 12.5                | -31.6       | 17.9                    |
| 45-54                        | 1,588               | -15.1               | -36.8       | 2,027        | 11.5                | -32.6       | 17.8                    |
| 55 and Over                  | 1,272               | -12.2               | -32.3       | 1,730        | 13.6                | -30.3       | 18.0                    |
| <u>By Industry</u>           | 36,492              | 14.0                | -42.0       | 59,747       | 22.5                | -29.3       | 10.2                    |
| Ag., For., Fish.             | 841                 | 158.8               | -20.8       | 1,960        | 26.5                | -14.3       | 3.5                     |
| Mining                       | 3,269               | 52.3                | -52.5       | 3,563        | 3.1                 | -29.4       | 15.1                    |
| Construction                 | 7,142               | 123.0               | -27.3       | 18,612       | 36.1                | -12.6       | 2.4                     |
| Manufacturing                | 8,579               | 7.2                 | -57.5       | 14,053       | 21.8                | -44.0       | 10.1                    |
| Pub. Utilities               | 1,362               | -14.8               | -35.4       | 2,334        | 26.5                | -30.7       | 9.9                     |
| Wholesale Trade              | 2,301               | -2.6                | -43.7       | 3,209        | 17.2                | -40.9       | 15.7                    |
| Retail Trade                 | 4,153               | -12.5               | -31.5       | 5,786        | 20.3                | -29.6       | 17.4                    |
| Fin., Ins., Real Est.        | 913                 | -7.4                | -29.1       | 1,038        | 10.2                | -30.8       | 28.6                    |
| Services                     | 6,068               | -18.0               | -36.5       | 7,302        | 10.8                | -25.9       | 19.1                    |
| Public Admin.                | 986                 | 61.4                | -16.4       | 1,389        | 10.9                | -11.7       | 12.3                    |
| Inf. Not Available           | 878                 | 38.5                | 34.7        | 501          | 35.0                | -41.7       | 2.1                     |
| <u>By Occupation</u>         | 36,492              | 14.0                | -42.0       | 59,747       | 22.5                | -29.3       | 10.2                    |
| Prof., Tech., Mgr.           | 4,732               | -24.6               | -40.8       | 5,028        | 11.1                | -35.5       | 25.4                    |
| Clerical                     | 3,973               | -13.5               | -37.1       | 4,255        | 6.3                 | -36.5       | 25.1                    |
| Sales                        | 1,330               | -13.4               | -33.1       | 1,601        | 18.9                | -34.8       | 23.1                    |
| Services                     | 2,947               | 3.7                 | -30.0       | 3,658        | 10.8                | -29.1       | 17.2                    |
| Farm., For., Fish.           | 781                 | 242.5               | -17.4       | 1,728        | 21.9                | -8.9        | 3.2                     |
| Processing                   | 1,439               | 5.7                 | -37.1       | 3,260        | 43.4                | -9.5        | 3.7                     |
| Machine Trade                | 1,952               | -1.6                | -61.9       | 2,705        | 17.7                | -53.0       | 13.8                    |
| Benchwork                    | 3,079               | 23.5                | -57.6       | 4,361        | 13.0                | -46.5       | 10.0                    |
| Structural Work              | 8,484               | 90.8                | -34.3       | 20,470       | 35.1                | -20.1       | 3.1                     |
| Misc.                        | 7,396               | 27.9                | -46.0       | 12,226       | 19.9                | -28.6       | 9.2                     |
| Inf. Not Available           | 379                 | -26.3               | 96.4        | 455          | 15.5                | 84.2        | 7.1                     |
| <u>By Duration</u>           | 36,492              | 14.0                | -42.0       | 59,747       | 22.5                | -29.3       |                         |
| 0-14 Weeks                   | 30,745              | 30.5                | -31.9       | 53,633       | 23.1                | -22.4       |                         |
| 15+ Weeks (Long-Term)        | 5,747               | -32.0               | -67.6       | 6,114        | 17.4                | -60.3       |                         |

# Labor Market Conditions

## Minnesota Nonagricultural Wage & Salary Employment, Hours, and Earnings

| INDUSTRY                          | EMPLOYMENT <sup>1/</sup><br>(thousands) |              |              | PER CENT<br>CHANGE<br>FROM |              | PRODUCTION WORKERS' HOURS & EARNINGS |              |                               |              |                            |              |
|-----------------------------------|-----------------------------------------|--------------|--------------|----------------------------|--------------|--------------------------------------|--------------|-------------------------------|--------------|----------------------------|--------------|
|                                   |                                         |              |              |                            |              | Average<br>Weekly<br>Earnings        |              | Average<br>Hourly<br>Earnings |              | Average<br>Weekly<br>Hours |              |
|                                   | Jan.<br>1984                            | Dec.<br>1983 | Jan.<br>1983 | Dec.<br>1983               | Jan.<br>1983 | Jan.<br>1984                         | Dec.<br>1983 | Jan.<br>1984                  | Dec.<br>1983 | Jan.<br>1984               | Dec.<br>1983 |
| <b>TOTAL NONAGRICULTURAL</b>      | 1717.6                                  | 1757.1       | 1651.2       | -2.2                       | 4.0          |                                      |              |                               |              |                            |              |
| <b>MANUFACTURING</b>              | 347.2                                   | 350.6        | 330.8        | -1.0                       | 5.0          | 398.78                               | 395.85       | 9.75                          | 9.75         | 40.9                       | 40.6         |
| Durable Goods                     | 208.1                                   | 209.9        | 195.1        | -0.8                       | 6.7          | 411.46                               | 408.51       | 9.82                          | 9.82         | 41.9                       | 41.6         |
| Furniture, Lumber and Wood        | 14.2                                    | 14.6         | 13.0         | -2.4                       | 9.6          | 407.23                               | 392.22       | 10.08                         | 9.83         | 40.4                       | 39.9         |
| Stone, Clay and Glass             | 7.9                                     | 8.8          | 7.0          | -10.2                      | 12.6         | 374.36                               | 375.59       | 9.80                          | 9.91         | 38.2                       | 37.9         |
| Primary Metals                    | 5.8                                     | 5.6          | 5.2          | 2.5                        | 10.6         | 391.87                               | 382.02       | 9.05                          | 9.01         | 43.3                       | 42.4         |
| Fabricated Metals                 | 32.7                                    | 33.1         | 32.1         | -1.1                       | 1.9          | 451.94                               | 465.72       | 10.89                         | 11.01        | 41.5                       | 42.3         |
| Nonelectrical Machinery           | 83.6                                    | 83.5         | 77.1         | 0.1                        | 8.3          | 425.00                               | 424.85       | 10.00                         | 10.02        | 42.5                       | 42.4         |
| Electrical Machinery              | 26.4                                    | 26.7         | 24.8         | -1.3                       | 6.5          | 355.73                               | 353.17       | 8.49                          | 8.51         | 41.9                       | 41.5         |
| Transportation Equipment          | 6.6                                     | 6.7          | 4.1          | -2.0                       | 60.3         | 487.08                               | 430.61       | 11.02                         | 10.58        | 44.2                       | 40.7         |
| Other Durable Goods <sup>2/</sup> | 31.0                                    | 30.9         | 31.8         | 0.4                        | -2.6         | 387.74                               | 386.74       | 9.21                          | 9.23         | 42.1                       | 41.9         |
| Nondurable Goods                  | 139.1                                   | 140.7        | 135.6        | -1.1                       | 2.5          | 381.18                               | 379.25       | 9.65                          | 9.65         | 39.5                       | 39.3         |
| Food and Kindred                  | 42.5                                    | 43.9         | 43.8         | -3.2                       | -3.0         | 346.46                               | 337.43       | 8.64                          | 8.63         | 40.1                       | 39.1         |
| Textile and Apparel               | 4.8                                     | 4.8          | 4.6          | 0.7                        | 3.9          | 220.46                               | 211.11       | 6.09                          | 5.93         | 36.2                       | 35.6         |
| Paper and Allied                  | 32.6                                    | 32.7         | 32.0         | -0.1                       | 2.0          | 479.16                               | 482.85       | 10.99                         | 11.16        | 43.6                       | 43.5         |
| Printing and Publishing           | 37.6                                    | 37.6         | 34.8         | -0.1                       | 7.9          | 380.49                               | 379.34       | 10.54                         | 10.45        | 36.1                       | 36.3         |
| Chemical and Petroleum            | 9.1                                     | 9.2          | 9.0          | -1.1                       | 0.4          | 433.76                               | 436.70       | 10.79                         | 11.00        | 40.2                       | 39.7         |
| Rubber and Leather                | 12.5                                    | 12.6         | 11.3         | -0.4                       | 10.4         | 313.01                               | 316.34       | 8.13                          | 8.07         | 38.5                       | 39.2         |
| <b>NONMANUFACTURING</b>           | 1370.4                                  | 1406.5       | 1320.5       | -2.6                       | 3.8          |                                      |              |                               |              |                            |              |
| Mining and Quarrying              | 7.9                                     | 7.0          | 7.8          | 12.1                       | 1.3          | 462.36                               | 472.64       | 12.53                         | 12.15        | 36.9                       | 38.9         |
| Metal Mining                      | 6.7                                     | 5.4          | 6.6          | 22.4                       | 0.5          | 482.39                               | 510.74       | 13.18                         | 12.93        | 36.6                       | 39.5         |
| Construction                      | 51.3                                    | 60.2         | 46.2         | -14.8                      | 11.1         | 559.11                               | 550.87       | 14.87                         | 15.01        | 37.6                       | 36.7         |
| Building                          | 16.3                                    | 18.7         | 14.2         | -12.5                      | 15.0         | 509.52                               | 509.22       | 13.66                         | 13.80        | 37.3                       | 36.9         |
| Highway and Heavy                 | 4.5                                     | 7.2          | 4.7          | -37.0                      | -3.9         | 433.26                               | 472.88       | 11.87                         | 12.61        | 36.5                       | 37.5         |
| Special Trades                    | 30.5                                    | 34.4         | 27.3         | -11.3                      | 11.6         | 604.88                               | 592.03       | 15.96                         | 16.22        | 37.9                       | 36.5         |
| Transportation                    | 58.6                                    | 60.7         | 57.5         | -3.4                       | 1.9          |                                      |              |                               |              |                            |              |
| Railroads                         | 10.4                                    | 10.8         | 10.7         | -3.7                       | -3.3         | 561.65                               | 561.65       | 11.75                         | 11.75        | 47.8                       | 47.8         |
| Trucking and Warehousing          | 23.3                                    | 24.9         | 22.6         | -6.4                       | 3.4          | 432.59                               | 469.20       | 11.95                         | 12.00        | 36.2                       | 39.1         |
| Public Utilities                  | 34.1                                    | 34.2         | 33.4         | -0.3                       | 2.1          | 508.87                               | 512.15       | 12.69                         | 12.74        | 40.1                       | 40.2         |
| Communications                    | 20.0                                    | 20.1         | 19.6         | -0.1                       | 2.2          | 471.64                               | 487.63       | 11.91                         | 12.07        | 39.6                       | 40.4         |
| Elec., Gas and Sanitary           | 14.1                                    | 14.2         | 13.8         | -0.6                       | 2.1          | 555.70                               | 541.44       | 13.62                         | 13.57        | 40.8                       | 39.9         |
| Trade                             | 428.5                                   | 445.1        | 414.5        | -3.7                       | 3.4          | 230.51                               | 230.79       | 7.46                          | 7.35         | 30.9                       | 31.4         |
| Retail                            | 319.2                                   | 334.3        | 308.3        | -4.5                       | 3.5          | 184.25                               | 187.28       | 6.42                          | 6.37         | 28.7                       | 29.4         |
| General Merchandise               | 48.8                                    | 51.7         | 44.9         | -5.7                       | 8.8          | 170.22                               | 175.34       | 5.89                          | 5.73         | 28.9                       | 30.6         |
| Food Stores                       | 43.8                                    | 45.0         | 44.9         | -2.7                       | -2.4         | 211.52                               | 210.78       | 7.37                          | 7.37         | 28.7                       | 28.6         |
| Automotive                        | 33.6                                    | 34.2         | 32.5         | -1.7                       | 3.4          | 308.02                               | 310.71       | 8.28                          | 8.33         | 37.2                       | 37.3         |
| Eating and Drinking               | 102.3                                   | 106.5        | 99.1         | -3.9                       | 3.3          | 115.20                               | 115.67       | 4.82                          | 4.76         | 23.9                       | 24.3         |
| Wholesale                         | 109.3                                   | 110.8        | 106.2        | -1.4                       | 2.9          | 397.17                               | 392.89       | 10.21                         | 10.10        | 38.9                       | 38.9         |
| F.I.R.E.                          | 101.5                                   | 102.1        | 98.0         | -0.6                       | 3.5          |                                      |              |                               |              |                            |              |
| Finance                           | 48.8                                    | 48.9         | 46.4         | -0.3                       | 5.1          |                                      |              |                               |              |                            |              |
| Insurance                         | 36.0                                    | 36.2         | 35.4         | -0.4                       | 1.6          |                                      |              |                               |              |                            |              |
| Real Estate                       | 16.7                                    | 17.0         | 16.2         | -1.8                       | 3.0          |                                      |              |                               |              |                            |              |
| Service Industries                | 395.4                                   | 401.2        | 376.1        | -1.4                       | 5.1          |                                      |              |                               |              |                            |              |
| Hotel and Lodging                 | 20.6                                    | 20.9         | 18.4         | -1.7                       | 11.5         |                                      |              |                               |              |                            |              |
| Business Services                 | 63.5                                    | 64.7         | 56.1         | -1.9                       | 13.2         |                                      |              |                               |              |                            |              |
| Health Services                   | 134.2                                   | 134.5        | 131.6        | -0.2                       | 2.0          |                                      |              |                               |              |                            |              |
| Private Education                 | 23.0                                    | 24.8         | 22.8         | -7.2                       | 0.8          |                                      |              |                               |              |                            |              |
| Soc. Serv., Museums etc.          | 86.0                                    | 86.9         | 81.6         | -1.0                       | 5.4          |                                      |              |                               |              |                            |              |
| Government                        | 293.1                                   | 296.0        | 287.0        | -1.0                       | 2.1          |                                      |              |                               |              |                            |              |
| Federal                           | 30.5                                    | 30.4         | 29.8         | 0.3                        | 2.3          |                                      |              |                               |              |                            |              |
| State                             | 73.7                                    | 74.7         | 72.2         | -1.3                       | 2.0          |                                      |              |                               |              |                            |              |
| Local                             | 188.9                                   | 190.9        | 184.9        | -1.1                       | 2.1          |                                      |              |                               |              |                            |              |

<sup>1/</sup> Totals may not add because of rounding.

<sup>2/</sup> Includes Scientific Instruments and Miscellaneous Industries.



# Labor Market Conditions

## Labor Force Data: State, SMSAs, and Counties

| Area or County                             | January, 1984 Prelim.        |        |             | Area or County          | January, 1984 Prelim.        |        |             |
|--------------------------------------------|------------------------------|--------|-------------|-------------------------|------------------------------|--------|-------------|
|                                            | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |                         | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |
| <u>State of Minnesota</u>                  | 2150765                      | 166822 | 7.8         | Lake                    | 4270                         | 925    | 21.7        |
| <u>Metropolitan Areas</u>                  |                              |        |             | Lake of the Woods       | 1885                         | 205    | 10.9        |
| Duluth/Superior<br>(Duluth City Only)      | 34232                        | 3510   | 10.3        | Le Sueur                | 10958                        | 1268   | 11.6        |
| Fargo/Moorhead<br>(Clay County, MN Only)   | 28021                        | 2179   | 7.8         | Lincoln                 | 3628                         | 353    | 9.7         |
| Minneapolis/St. Paul SMSA <sup>2/</sup>    | 1186082                      | 63556  | 5.4         | Lyon                    | 14585                        | 1405   | 9.6         |
| Rochester SMSA <sup>3/</sup> (Olmsted Co.) | 59192                        | 3078   | 5.2         | McLeod                  | 16183                        | 1320   | 8.2         |
| St. Cloud SMSA <sup>3/</sup>               | 78600                        | 7707   | 9.8         | Mahnomen                | 2821                         | 377    | 13.4        |
|                                            |                              |        |             | Marshall                | 6199                         | 1164   | 18.8        |
|                                            |                              |        |             | Martin                  | 13262                        | 1034   | 7.8         |
|                                            |                              |        |             | Meeker                  | 10440                        | 1443   | 13.8        |
| <u>Counties</u>                            |                              |        |             | Mille Lacs              | 8512                         | 989    | 11.6        |
| Aitkin                                     | 5400                         | 1234   | 22.9        | Morrison                | 12396                        | 1704   | 13.7        |
| Anoka                                      | 112737                       | 6470   | 5.7         | Mower                   | 17757                        | 1508   | 8.5         |
| Becker                                     | 12537                        | 2452   | 19.6        | Murray                  | 5910                         | 736    | 12.5        |
| Beltrami                                   | 16148                        | 1661   | 10.3        | Nicollet                | 14524                        | 861    | 5.9         |
| Benton                                     | 12189                        | 1252   | 10.3        | Nobles                  | 11595                        | 1132   | 9.8         |
| Big Stone                                  | 3669                         | 356    | 9.7         | Norman                  | 4265                         | 389    | 9.1         |
| Blue Earth                                 | 28288                        | 1745   | 6.2         | Olmsted                 | 59192                        | 3078   | 5.2         |
| Brown                                      | 14763                        | 1347   | 9.1         | Otter Tail              | 24383                        | 3481   | 14.3        |
| Carlton                                    | 11846                        | 1526   | 12.9        | Pennington              | 6373                         | 725    | 11.4        |
| Carver                                     | 21458                        | 1372   | 6.4         |                         |                              |        |             |
| Cass                                       | 9719                         | 1542   | 15.9        | Pine                    | 9546                         | 1482   | 15.5        |
| Chippewa                                   | 7230                         | 822    | 11.4        | Pipestone               | 5407                         | 383    | 7.1         |
| Chisago                                    | 15362                        | 1419   | 9.2         | Polk                    | 17478                        | 1580   | 9.0         |
| Clay                                       | 28021                        | 2179   | 7.8         | Pope                    | 5127                         | 558    | 10.9        |
| Clearwater                                 | 4131                         | 1052   | 25.5        | Ramsey                  | 262977                       | 13690  | 5.2         |
| Cook                                       | 2191                         | 368    | 16.8        | Red Lake                | 2194                         | 476    | 21.7        |
| Cottonwood                                 | 7176                         | 540    | 7.5         | Redwood                 | 10075                        | 678    | 6.7         |
| Crow Wing                                  | 16706                        | 2379   | 14.2        | Renville                | 10884                        | 1071   | 9.8         |
| Dakota                                     | 111732                       | 6488   | 5.8         | Rice                    | 23618                        | 2142   | 9.1         |
| Dodge                                      | 7762                         | 853    | 11.0        | Rock                    | 5440                         | 285    | 5.2         |
| Douglas                                    | 12458                        | 839    | 6.7         | Roseau                  | 5543                         | 936    | 16.9        |
| Faribault                                  | 10044                        | 893    | 8.9         | St. Louis (Inc. Duluth) | 88391                        | 14829  | 16.8        |
| Fillmore                                   | 11848                        | 1244   | 10.5        | Scott                   | 25710                        | 1971   | 7.7         |
| Freeborn                                   | 17437                        | 1575   | 9.0         | Sherburne               | 14481                        | 1494   | 10.3        |
| Goodhue                                    | 19423                        | 1416   | 7.3         | Sibley                  | 8214                         | 825    | 10.0        |
| Grant                                      | 3350                         | 313    | 9.3         | Stearns                 | 51930                        | 4961   | 9.6         |
| Hennepin                                   | 535683                       | 25266  | 4.7         | Steele                  | 16006                        | 1267   | 7.9         |
| Houston                                    | 9857                         | 829    | 8.4         | Stevens                 | 5620                         | 418    | 7.4         |
| Hubbard                                    | 5495                         | 894    | 16.3        | Swift                   | 5973                         | 630    | 10.5        |
| Isanti                                     | 10176                        | 988    | 9.7         | Todd                    | 11167                        | 1175   | 10.5        |
| Itasca                                     | 17626                        | 2897   | 16.4        | Traverse                | 2638                         | 243    | 9.2         |
| Jackson                                    | 7588                         | 467    | 6.2         | Wabasha                 | 8972                         | 942    | 10.5        |
| Kanabec                                    | 5314                         | 765    | 14.4        | Wadena                  | 5370                         | 684    | 12.7        |
| Kandiyohi                                  | 17749                        | 1560   | 8.8         | Waseca                  | 8691                         | 644    | 7.4         |
| Kittson                                    | 3271                         | 365    | 11.2        | Washington              | 65184                        | 3608   | 5.5         |
| Koochiching                                | 7658                         | 955    | 12.5        | Watsonwan               | 6636                         | 516    | 7.8         |
| Lac qui Parle                              | 5506                         | 420    | 7.6         | Wilkin                  | 4103                         | 319    | 7.8         |
|                                            |                              |        |             | Winona                  | 22192                        | 2200   | 9.9         |
|                                            |                              |        |             | Wright                  | 35239                        | 3272   | 9.3         |
|                                            |                              |        |             | Yellow Medicine         | 7273                         | 702    | 9.7         |

### Technical Notes:

<sup>1/</sup> Labor force data is computed according to BLS methodology. The method includes an adjustment to assure that the sum of the substate areas equals the separately estimated State total. This adjustment is applied to all county and SMSA areas. County and area unemployment was multiplied by an adjustment factor of 1.48; employment was multiplied by 1.03. For a more detailed explanation see the Review of Labor and Economic Conditions, Vol. 4, No. 4, (February 1978 issue), p. 29.

<sup>2/</sup> Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright Counties.

<sup>3/</sup> Benton, Sherburne, and Stearns Counties.

# Income & Purchasing Power

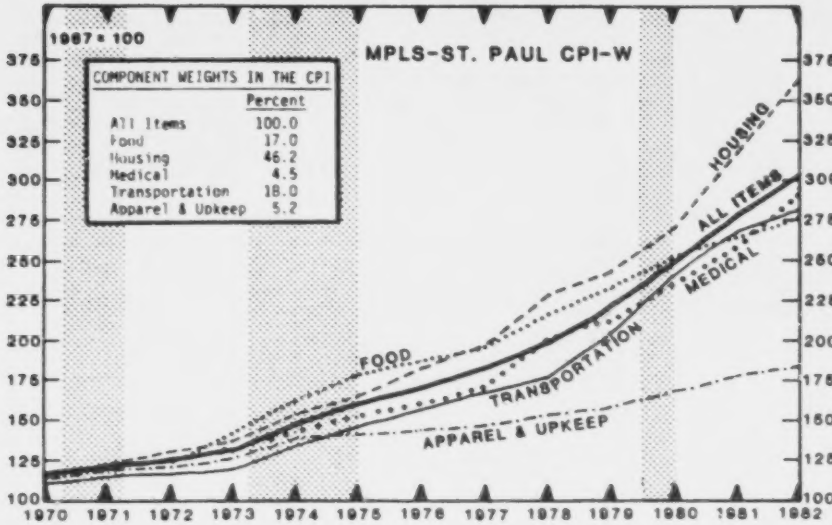
This section describes how Minnesotans fare with respect to their ability to acquire goods and services needed to meet their needs and wants and how they compare with others in the United States in this respect. Real Per Capita Personal Income measures money income received by all individuals from wages and salaries, dividends, rent, professional and farm income, personal interest payments, and transfer payments, less personal contributions for social security, all adjusted for the price level as indicated by the CPI

and for population. The Consumer Price Index (CPI) measures changes in the price of a representative combination of goods and services consumed by urban wage and salary workers relative to 1967. The inverse of the CPI (1/CPI) indicates the value of the dollar; when the CPI increases the value of the dollar falls. The change in the CPI over any period of time divided by the value at the beginning of the period gives the percentage change, or the rate of inflation.

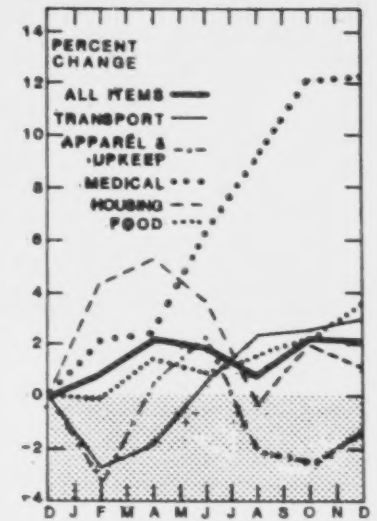
| Income And Purchasing Power                      | MINNESOTA       |                        |          | UNITED STATES   |                        |          |
|--------------------------------------------------|-----------------|------------------------|----------|-----------------|------------------------|----------|
|                                                  | IV Qtr.<br>1983 | Percent Change<br>from |          | IV Qtr.<br>1983 | Percent Change<br>from |          |
|                                                  |                 | Last Qtr.              | Year Ago |                 | Last Qtr.              | Year Ago |
| <u>INCOME STATISTICS</u>                         |                 |                        |          |                 |                        |          |
| Personal Income <u>1/</u> *                      |                 |                        |          |                 |                        |          |
| Total Personal Income (in Billions)              | 51.8            | 3.0                    | 8.8      | 2834.4          | 2.6                    | 7.7      |
| Due to Labor <u>2/</u>                           | n.a.            | n.a.                   | n.a.     | 1899.4          | 56.8                   | 75.6     |
| Due to Property <u>3/</u>                        | n.a.            | n.a.                   | n.a.     | 649.8           | 39.0                   | 24.9     |
| Due to Transfer Payments <u>4/</u>               | n.a.            | n.a.                   | n.a.     | 407.5           | 6.9                    | 4.2      |
| Total Disposable Personal Income                 | n.a.            | n.a.                   | n.a.     | 2423.6          | 2.6                    | 8.8      |
| As Percent of Total Pers. Inc.                   | n.a.            | n.a.                   | n.a.     | 85.5            | 0.0                    | 1.1      |
| Per Capita Personal Income <u>5/</u>             |                 |                        |          |                 |                        |          |
| Current dollar Value                             | 12394           | 2.7                    | 8.1      | 12057           | 2.4                    | 6.7      |
| Real (1967) Dollar Value                         | 3965            | 1.7                    | 6.1      | 4000            | 1.7                    | 3.7      |
| Real Median Family Money Income <u>5/</u> *      |                 |                        |          |                 |                        |          |
| All Families                                     | 9131            | 1.4                    | 5.3      | 8899            | 1.5                    | 3.2      |
| Four Person Families                             | 9438            | 1.2                    | 4.6      | 10378           | 1.5                    | 3.3      |
| Earnings of Prnduction Workers in Mfg. <u>6/</u> |                 |                        |          |                 |                        |          |
| Average Weekly Earnings                          | 391.64          | 3.1                    | 7.1      | 367.43          | 2.9                    | 8.4      |
| Real Average Weekly Earnings <u>7/</u>           | 125.28          | 2.2                    | 5.1      | 121.91          | 2.3                    | 5.3      |
| Income Related Criteria <u>8/</u>                |                 |                        |          |                 |                        |          |
| Standard Budgets                                 |                 |                        |          |                 |                        |          |
| Low                                              |                 |                        |          |                 |                        |          |
| Moderate                                         |                 |                        |          |                 |                        |          |
| High                                             |                 |                        |          |                 |                        |          |
| Poverty Level Income                             |                 |                        |          |                 |                        |          |
| Urban Family of four                             | 9300            | ---                    | 10.1     | 9300            | ---                    | 10.1     |
| Nonurban Family of Four                          | 7910            | ---                    | 10.0     | 7910            | ---                    | 10.0     |
| <u>MEASURES OF PRICE CHANGE AND INFLATION</u>    |                 |                        |          |                 |                        |          |
| Consumer Price Level (CPI) <u>9/</u>             |                 |                        |          |                 |                        |          |
| Food                                             | 312.6           | 0.9                    | 1.9      | 301.4           | 0.6                    | 2.9      |
| Housing                                          | 298.9           | 1.1                    | 2.5      | 293.2           | 0.3                    | 2.2      |
| Transportation                                   | 359.4           | 0.8                    | -0.4     | 324.6           | 0.1                    | 1.7      |
| Medical                                          | 289.9           | 0.6                    | 2.8      | 307.8           | 1.3                    | 3.7      |
|                                                  | 340.7           | 2.8                    | 13.1     | 362.7           | 1.4                    | 6.9      |
| Purchasing Power of the Dollar (1/CPI)           | .32             | -0.9                   | -1.9     | .33             | -0.6                   | -2.6     |
| Wholesale Price Index                            |                 |                        |          |                 |                        |          |
| Industrial Commodities                           | n.a.            | n.a.                   | n.a.     | 306.0           | 0.5                    | 1.9      |
|                                                  | n.a.            | n.a.                   | n.a.     | 318.5           | 0.5                    | 1.2      |

# Income & Purchasing Power

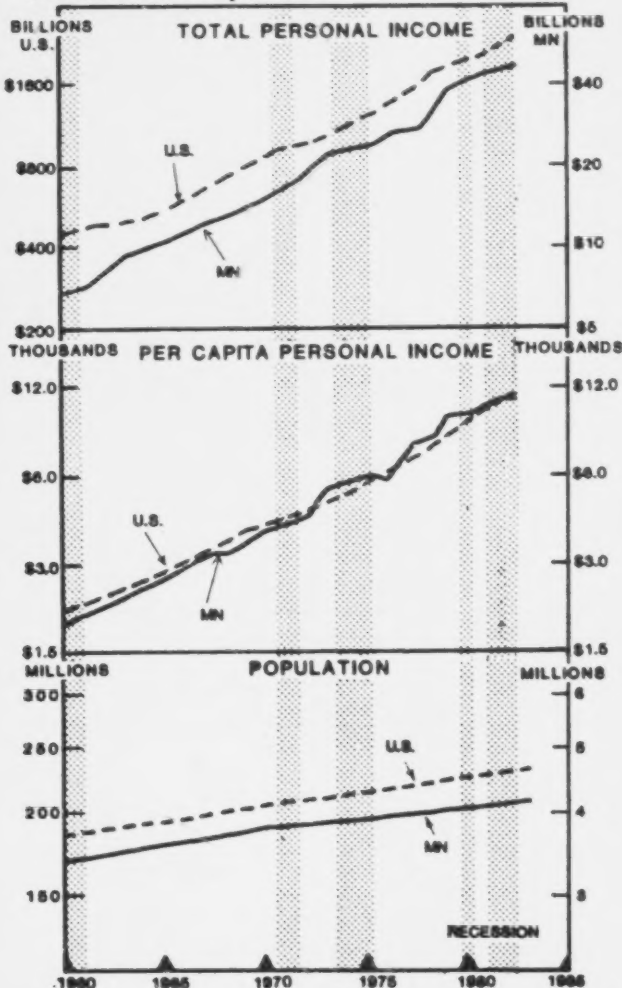
## Consumer Price Index- Major Components



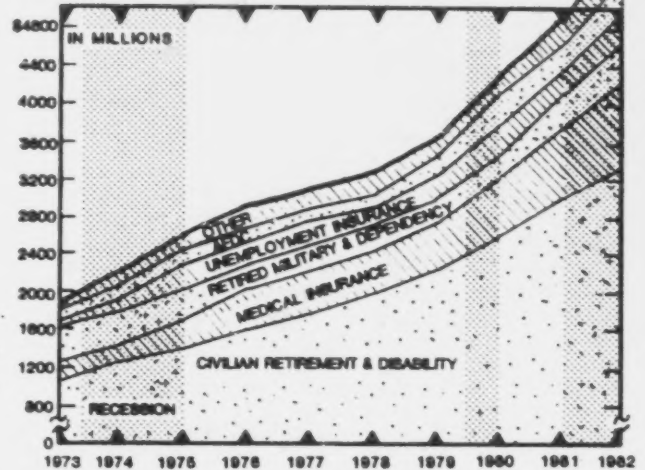
%  $\Delta$  From Dec. 1982



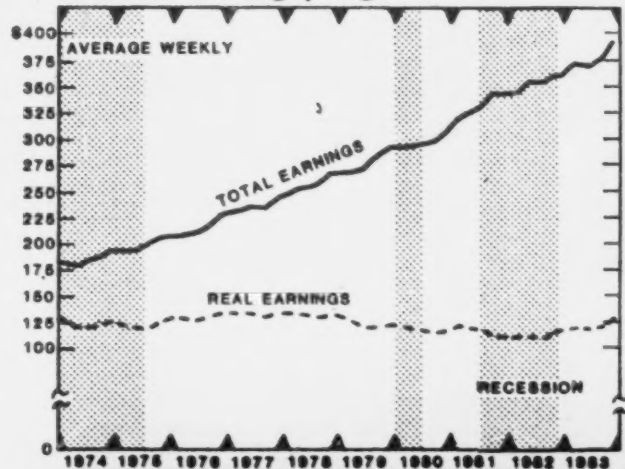
## U.S. & MN Personal Income And Population



## Government Transfer Payments To Individuals In Minnesota



## Minnesota Earnings, Mfg.



# Output, Expenditures, Money, & Credit Conditions

The overall level and composition of National Output shape labor market conditions, and nominal and real earnings. (Nominal values are not adjusted for inflation; real values are adjusted for inflation.) Personal Consumption Expenditures, especially on Durable Goods, together with data on Retail Sales, are frequently used as indicators of future levels of employment. The number of Building Permits influences the level of employment in construction and related industries. The Federal Budget Deficit is a key indicator of the stimulatory effect of government policy. Whether this effect results in inflation, improved employment conditions, or some combination

of the two, depends in part, upon the degree to which present productive capacity is utilized. Present and anticipated Money and Credit Conditions determine the ability of consumers, business, and State and Local governments to borrow in order to finance purchases, which, in turn, generate income and employment. Unfortunately, most data of this kind is available only for the Nation. However, in an economy as interdependent as ours, analysis of the directions of change of key national indicators is a useful tool for understanding the course of the State economy.

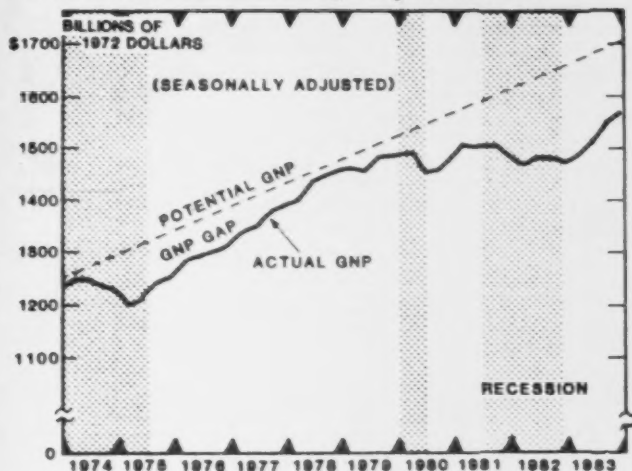
| Output, Expenditure, Money,<br>And Credit Conditions                   | MINNESOTA       |                        |          | UNITED STATES   |                        |          |
|------------------------------------------------------------------------|-----------------|------------------------|----------|-----------------|------------------------|----------|
|                                                                        | IV Qtr.<br>1983 | Percent Change<br>from |          | IV Qtr.<br>1983 | Percent Change<br>from |          |
|                                                                        |                 | Last Qtr.              | Year Ago |                 | Last Qtr.              | Year Ago |
| OUTPUT AND EXPENDITURE                                                 |                 |                        |          |                 |                        |          |
| Retail Sales (in millions of dollars)                                  | 1904            | 3.6                    | 9.4      | 101627          | 2.8                    | 10.5     |
| Private Housing Units Authorized by<br>Building Permits <sup>1/</sup>  | 19952           | -15.9                  | 2.4      | 1626            | -1.3                   | 31.6     |
| Index of Industrial Production <sup>2/</sup>                           | n.a.            | n.a.                   | n.a.     | 156.0           | 2.8                    | 15.3     |
| Gross National Product (in billions of <sup>3/</sup><br>1972 dollars)* | n.a.            | n.a.                   | n.a.     | 1570.5          | 1.1                    | 6.1      |
| Personal Consumption Expenditures                                      | n.a.            | n.a.                   | n.a.     | 1032.2          | 1.6                    | 5.4      |
| Durable Goods                                                          | n.a.            | n.a.                   | n.a.     | 163.6           | 3.6                    | 14.2     |
| As Percent of Pers. Cons.                                              | n.a.            | n.a.                   | n.a.     | 15.8            | 1.9                    | 8.2      |
| Nondurable Goods                                                       | n.a.            | n.a.                   | n.a.     | 383.3           | 1.4                    | 4.7      |
| Services                                                               | n.a.            | n.a.                   | n.a.     | 485.3           | 1.1                    | 3.2      |
| Gross Private Domestic Investment                                      | n.a.            | n.a.                   | n.a.     | 242.5           | 5.1                    | 35.9     |
| As Percent of GNP                                                      | n.a.            | n.a.                   | n.a.     | 15.4            | 3.4                    | 28.3     |
| Nonresidential, Fixed                                                  | n.a.            | n.a.                   | n.a.     | 178.9           | 5.2                    | 11.5     |
| Residential                                                            | n.a.            | n.a.                   | n.a.     | 56.1            | -1.2                   | 38.2     |
| Net Exports                                                            | n.a.            | n.a.                   | n.a.     | 2.5             | -78.1                  | -89.1    |
| Government Purchases                                                   | n.a.            | n.a.                   | n.a.     | 293.2           | -0.7                   | -2.2     |
| Federal                                                                | n.a.            | n.a.                   | n.a.     | 116.9           | -1.7                   | -6.0     |
| State and Local                                                        | n.a.            | n.a.                   | n.a.     | 176.3           | 0.0                    | 0.6      |
| GNP Gap (Full Empl. Minus Present GNP)<br>1972 Dollars (in billions)   | n.a.            | n.a.                   | n.a.     | n.a.            | n.a.                   | n.a.     |
| Current Dollars (in billions)                                          | n.a.            | n.a.                   | n.a.     | n.a.            | n.a.                   | n.a.     |
| Current Federal Budget Deficit <sup>4/</sup><br>As Percent of GNP      | n.a.            | n.a.                   | n.a.     | -5.7            | -5.6                   | -6.7     |
| Inventory to Sales: Durable Goods in Mfg.                              | n.a.            | n.a.                   | n.a.     | 1.85            | -5.1                   | -23.9    |
| New Orders to Shipments: Durable Goods                                 | n.a.            | n.a.                   | n.a.     | 1.04            | 1.2                    | 4.2      |
| Plant Capacity Utilization Rate in Mfg. <sup>5/</sup>                  | n.a.            | n.a.                   | n.a.     | 79.2            | 2.3                    | 12.0     |
| MONEY AND CREDIT CONDITIONS                                            |                 |                        |          |                 |                        |          |
| Interest Rates                                                         |                 |                        |          |                 |                        |          |
| Discount Rate                                                          | 8.50            | 0.0                    | -8.1     | 8.50            | 0.0                    | -8.1     |
| Prime Rate                                                             | n.a.            | n.a.                   | n.a.     | 11.00           | 1.9                    | -8.0     |
| Rate on Conventional Mortgages                                         | 11.76           | -4.2                   | -12.2    | 12.53           | -1.3                   | -12.4    |
| Federal Funds Rate                                                     | n.a.            | n.a.                   | n.a.     | 9.43            | -0.3                   | 1.6      |
| Consumer Installment Credit Outstanding<br>As Percent of Disposable    | n.a.            | n.a.                   | n.a.     | 378626          | 4.3                    | 11.5     |
| Personal Income                                                        | n.a.            | n.a.                   | n.a.     | 15.6            | 1.6                    | 2.5      |



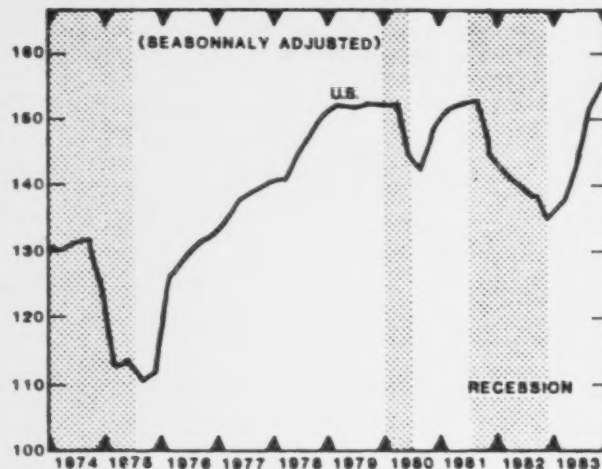
# BEST AVAILABLE COPY

## Output, Expenditures, Money, & Credit Conditions

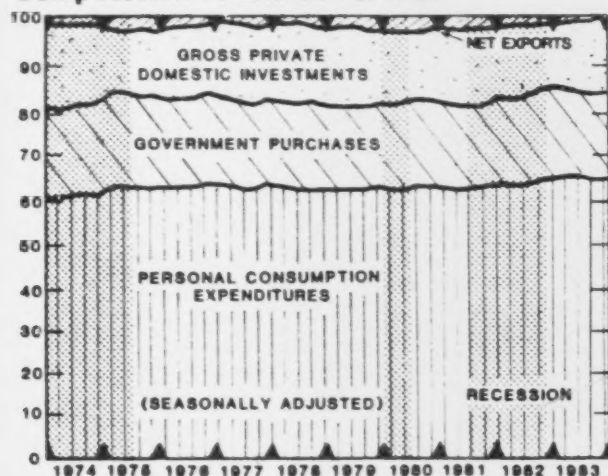
### Potential & Seasonally Adjusted GNP



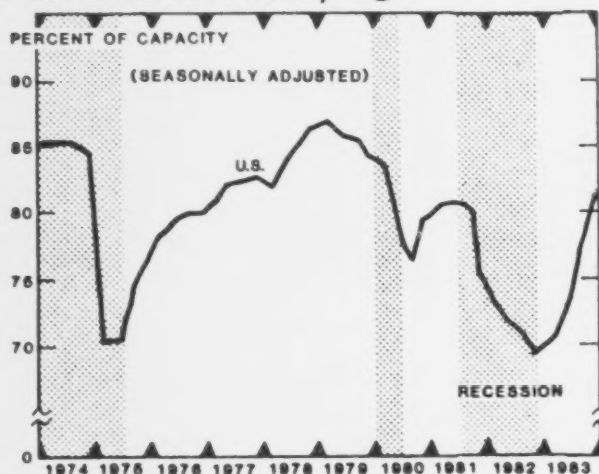
### Index of Industrial Production



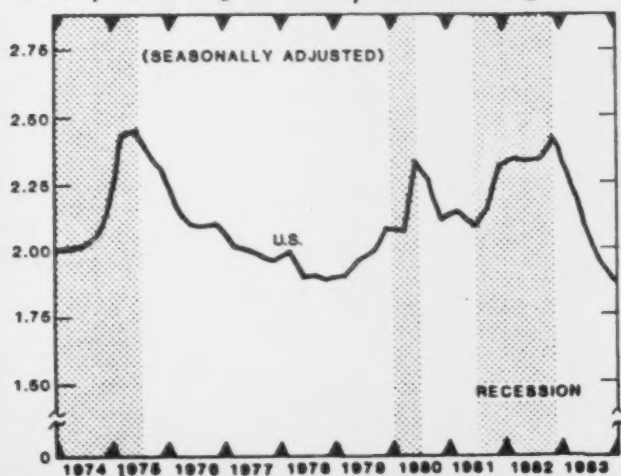
### Composition of GNP in Percent



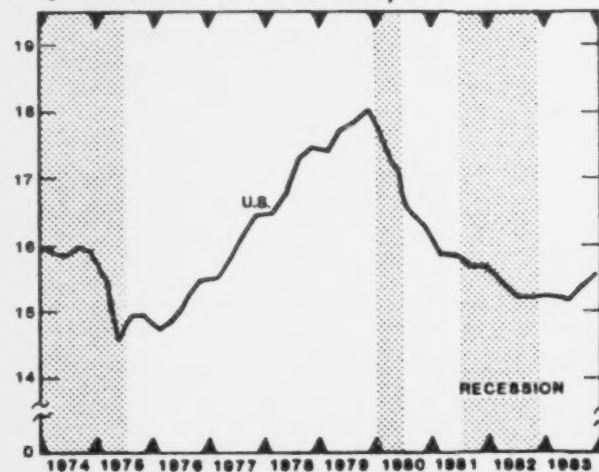
### Plant Utilization Rates, Mfg.



### Ratio, Inventory to Sales, Durable Mfg.



### Ratio, Consumer Installment Debt to Disposable Personal Income, U.S.



# Technical Notes

For the reader's convenience the notes which follow are organized in sequence for the pages which appear in the statistical section. Each note corresponds to the footnote or reference notation for the given page.

\* Wherever an asterick appears the data is seasonlly adjusted.

## Page S-2

- 1/ Four percent is a generally agreed upon criteria for measuring full employment. It allows for the movement of persons between jobs. Labor Force Unemployment Rate less four percent, based on official estimates.
- 2/ Estimated worker hours expended in nonfarm payroll employment as a percent of potential worker hours assuming that each member of the nonfarm labor payroll labor force was employed at a standard rate of 40 hours per week.

## Page S-3

- 1/ The handbook unemployment rate is the estimate of unemployment prior to the Current Population Survey (CPS) adjustment.

## Page S-7

- 1/ In billions of dollars at an annual rate.
- 2/ The contribution to total Personal Income of wages, salaries, and other labor income. Percent change entry in Labor Income Impact is the percent that the change in labor income comprises of the change in total Personal Income. This is not available for Minnesota on a quarterly basis.
- 3/ The figure for the quarter is the contribution to total Personal Income of proprietor's rental, dividend, and interest income. The percent change entry in Property Income Impact is analogous to the Labor Income Impact described in 2/ above.
- 4/ The contribution to total Personal Income of transfer payments (unemployment compensation, AFDC, etc.) The percent change entry is analogous to the Labor Income Impact in 2/ above.
- 5/ In dollars at an annual rate.
- 6/ In dollars per week.
- 7/ Real average weekly earnings are the average weekly earnings of production workers in manufacturing divided by the CPI.
- 8/ Annual data.
- 9/ Value is CPI-W (Urban Wage earners and clerical workers).

## Page S-9

- 1/ U.S. data annualized in thousands. Source: Bureau of the Census.
- 2/ Base Year is 1967. Source: Federal Reserve Board.
- 3/ Totals may not add due to rounding.
- 4/ Values shown in percent change columns are deficit as percent of GNP for period cited.
- 5/ Source: Federal Reserve Board.

## Available Publications

Employment, Hours, and Earnings, January 1970-February 1983, Minneapolis-St. Paul Area (April 1983)

1980 Occupational Employment Statistics in Minnesota (May 1982)

1981 Occupational Employment Statistics in Minnesota (November 1982)

Important Minnesota Occupations by Industry (January 1983)

Review of Labor and Economic Conditions and its Monthly Supplement (Recent Issues)

Unemployment Compensation Program Statistics: Total Wages, Taxable Wages, Contributions Due, and Benefits Paid, 1950-1978 (April 1980)

Minnesota Employment and Wage data by County (Second Quarter 1983) Limited number available for 1975-1981

Average Covered Employment & Wages by Economic Region for the Calendar Year 1982 by two Digits of Industry (also available for 1976-1981)

Minnesota Labor Market Information Directory (April 1982)

1983 Minnesota Salary Survey by Area (September 1983)

1983 Minnesota Hospitals and Nursing Homes Salary Survey (September 1983)

1983 Minnesota Wage Data by Industry and Size of Firm (September 1983)

Labor Market Information Summary for 1983 for Minneapolis-St. Paul SMSA (August 1983), St. Cloud SMSA (August 1983), Duluth-Superior (October 1983), and Minnesota (September 1983)

Cyclical Sensitivity in Minnesota (August 1981)

These publications are available upon request while supply lasts.

Write to: Director, Research and Statistical Services Office  
Minnesota Department of Economic Security  
390 North Robert Street  
St. Paul, Minnesota 55101

# CURRENT MINNESOTA LABOR MARKET CONDITIONS

January, 1984 Supplement to The Review of Labor and Economic Conditions

Prepared by the Research and Statistical Services Office, MN Dept. of Economic Security, 390 N. Robert St., St. Paul MN 55101, in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics, and Employment and Training Admin.

## Nation

Although some of the Nation's economic indicators for December and the fourth quarter suggested that the economy may be slowing down, other barometers, especially employment, unemployment and income showed that the recovery was still continuing at a satisfactory rate. Moreover, the majority of economists believe that the upturn will persist throughout 1984.

The Nation's seasonally adjusted unemployment rate fell by 0.2 of a percentage point to 8.2 percent in December after a drop of 0.4 of a point in November. Since the recession high a year ago, the rate has declined by 2.5 percentage points. Total employment, also seasonally adjusted, rose by 335,000 in December after a large gain of 636,000 in November. Employment has risen by about 4 million since the end of the recession. Also, nonfarm payroll employment (seasonally adjusted) increased by 231,000 in December following an advance of 326,000 in November and has risen by 3 million since December 1982. Although total payroll employment has now exceeded the pre-recession high in July 1981, manufacturing has regained only half of the jobs lost during the recession.

Slower growth in real gross national product in the fourth quarter and smaller gains in industrial production and retail sales in December suggested that the recovery may be losing some speed. However, personal income and personal consumption expenditures showed a healthy increase in December. The recent solid gains in employment and income, together with low inventory levels and strong consumer demand, should extend the upturn well into the foreseeable future.

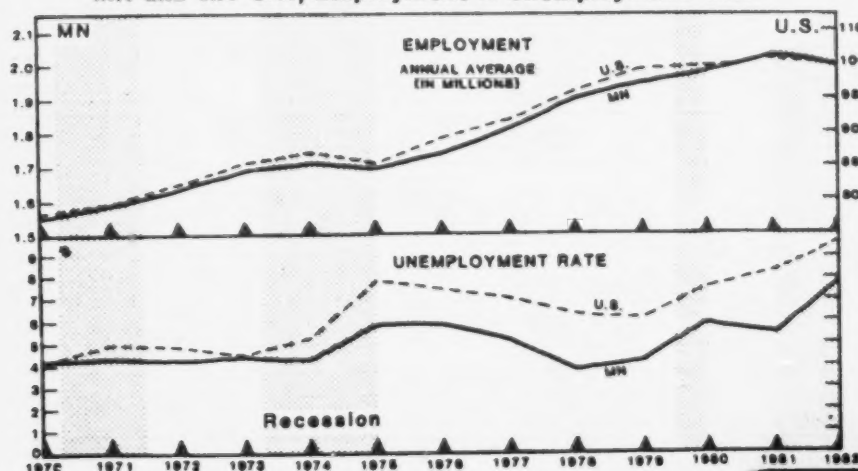
## State

Strong over-the-year growth in total employment and a less than normal monthly increase in the unemployment rate indicated that the Minnesota economy was continuing to expand in December. Although the December gain in seasonally adjusted nonfarm payroll employment was not as large as in earlier months, payroll employment rose for the sixth consecutive month in December. However, the annual revisions of the establishment data which will be available in February are expected to show larger increases for payroll employment in 1983, especially in manufacturing.

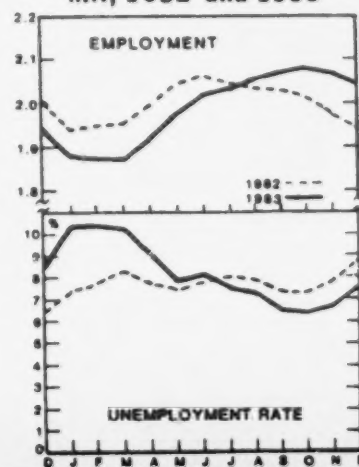
Minnesota's seasonally unadjusted unemployment rate rose 0.7 of a percentage point to 7.5 percent in December after a rise of 0.4 of a point in November. The increases in both months were somewhat less than the average rises for November and December. Also, the December drop of 1.4 percent in unadjusted total employment was less than the average December decline of 1.6 percent. Even more important, the over-the-year rise of 5.3 percent in total employment was the largest since the 5.3 percent gain in September, 1978. The over-the-year advances in total employment have been getting increasingly larger in every month since August. Meanwhile, seasonally adjusted nonfarm payroll employment rose a modest 2,300 in December after gains of 4,000 in November and 12,000 in October. The largest increases since the recession low in December, 1982 have occurred in trade (16,300), services (15,700) and manufacturing (8,900). However, total payroll employment was still below (43,000) the pre-recession high in January, 1981.

| Labor Force Estimates | MINNESOTA<br>(Numbers in '000's) |                    |                  | UNITED STATES<br>(Numbers in '000,000's) |                    |                  |
|-----------------------|----------------------------------|--------------------|------------------|------------------------------------------|--------------------|------------------|
|                       | December<br>1983                 | Change<br>Last Mo. | From<br>Year Ago | December<br>1983                         | Change<br>Last Mo. | From<br>Year Ago |
|                       |                                  |                    |                  |                                          |                    |                  |
| Civilian Labor Force  | 2212.8                           | -12.7              | 83.8             | 111.8                                    | -0.3               | 1.3              |
| Employed              | 2046.4                           | -28.3              | 103.1            | 102.8                                    | -0.2               | 4.0              |
| Unemployed            | 166.4                            | 15.6               | -19.3            | 9.0                                      | -0.1               | -2.7             |
| Unemployment Rate     |                                  |                    |                  |                                          |                    |                  |
| Actual                | 7.5                              | 0.7                | -1.2             | 8.0                                      | -0.1               | -2.5             |
| Seasonally Adjusted   | n.a                              | n.a                | n.a              | 8.2                                      | -0.2               | -2.6             |

MN and the U.S., Employment & Unemployment Rate



MN, 1982 and 1983





# Minnesota Nonagricultural Wage & Salary Employment, Hours, and Earnings

| INDUSTRY                          | EMPLOYMENT <sup>1/</sup><br>(thousands) |              |              | PER CENT<br>CHANGE<br>FROM |              | PRODUCTION WORKERS' HOURS & EARNINGS |              |                               |              |                            |              |
|-----------------------------------|-----------------------------------------|--------------|--------------|----------------------------|--------------|--------------------------------------|--------------|-------------------------------|--------------|----------------------------|--------------|
|                                   |                                         |              |              |                            |              | Average<br>Weekly<br>Earnings        |              | Average<br>Hourly<br>Earnings |              | Average<br>Weekly<br>Hours |              |
|                                   | Dec.<br>1983                            | Nov.<br>1983 | Dec.<br>1982 | Nov.<br>1983               | Dec.<br>1982 | Dec.<br>1983                         | Nov.<br>1983 | Dec.<br>1983                  | Nov.<br>1983 | Dec.<br>1983               | Nov.<br>1983 |
| <b>TOTAL NONAGRICULTURAL</b>      | 1744.6                                  | 1744.6       | 1693.9       | 0                          | 3.0          |                                      |              |                               |              |                            |              |
| <b>MANUFACTURING</b>              | 342.0                                   | 342.3        | 333.2        | -0.1                       | 2.6          | 393.73                               | 389.54       | 9.77                          | 9.69         | 40.3                       | 40.2         |
| Durable Goods                     | 203.7                                   | 203.2        | 196.9        | 0.3                        | 3.5          | 406.31                               | 401.88       | 9.91                          | 9.85         | 41.0                       | 40.8         |
| Furniture, Lumber and Wood        | 13.2                                    | 13.5         | 12.4         | -2.1                       | 6.4          | 391.44                               | 400.47       | 9.86                          | 10.19        | 39.7                       | 39.3         |
| Stone, Clay and Glass             | 7.8                                     | 8.4          | 7.9          | -6.7                       | -0.7         | 375.73                               | 368.10       | 9.94                          | 9.79         | 37.8                       | 37.6         |
| Primary Metals                    | 5.0                                     | 4.9          | 5.0          | 3.1                        | 1.4          | 373.98                               | 374.59       | 8.99                          | 8.94         | 41.6                       | 41.9         |
| Fabricated Metals                 | 33.2                                    | 33.3         | 32.4         | -0.2                       | 2.5          | 462.02                               | 450.55       | 11.16                         | 11.07        | 41.4                       | 40.7         |
| Nonelectrical Machinery           | 80.9                                    | 80.0         | 76.9         | 1.2                        | 5.3          | 420.40                               | 416.42       | 10.13                         | 10.01        | 41.5                       | 41.6         |
| Electrical Machinery              | 26.0                                    | 25.2         | 25.4         | 3.3                        | 2.3          | 349.38                               | 343.60       | 8.48                          | 8.36         | 41.2                       | 41.1         |
| Transportation Equipment          | 6.3                                     | 6.1          | 6.0          | 4.0                        | 6.0          | 459.64                               | 464.20       | 10.97                         | 11.00        | 41.9                       | 42.2         |
| Other Durable Goods <sup>2/</sup> | 31.1                                    | 31.8         | 30.9         | -2.2                       | 0.7          | 383.23                               | 377.99       | 9.37                          | 9.31         | 40.9                       | 40.6         |
| Non durable Goods                 | 138.3                                   | 139.1        | 136.3        | -0.6                       | 1.4          | 376.10                               | 373.51       | 9.57                          | 9.48         | 39.3                       | 39.4         |
| Food and Kindred                  | 43.9                                    | 45.1         | 45.1         | -2.6                       | -2.6         | 335.94                               | 332.20       | 8.57                          | 8.41         | 39.2                       | 39.5         |
| Textile and Apparel               | 4.6                                     | 4.6          | 4.4          | -1.0                       | 3.9          | 219.47                               | 218.52       | 5.98                          | 5.89         | 36.7                       | 37.1         |
| Paper and Allied                  | 32.7                                    | 32.5         | 31.9         | 0.5                        | 2.3          | 469.20                               | 469.20       | 11.04                         | 11.04        | 42.5                       | 42.5         |
| Printing and Publishing           | 36.0                                    | 35.8         | 35.3         | 0.6                        | 1.9          | 374.71                               | 373.24       | 10.21                         | 10.17        | 36.7                       | 36.7         |
| Chemical and Petroleum            | 9.1                                     | 9.2          | 8.8          | -1.2                       | 3.5          | 427.00                               | 428.08       | 10.81                         | 10.81        | 39.5                       | 39.6         |
| Rubber and Leather                | 12.1                                    | 11.9         | 10.8         | 0.9                        | 11.6         | 318.30                               | 316.76       | 8.12                          | 8.06         | 39.2                       | 39.3         |
| <b>NONMANUFACTURING</b>           | 1402.6                                  | 1402.3       | 1360.7       | 0                          | 3.1          |                                      |              |                               |              |                            |              |
| Mining and Quarrying              | 7.0                                     | 7.2          | 6.5          | -3.1                       | 7.0          | 483.28                               | 413.83       | 12.36                         | 12.03        | 39.1                       | 34.4         |
| Metal Mining                      | 5.5                                     | 5.1          | 5.0          | 7.0                        | 9.8          | 515.48                               | 430.34       | 13.05                         | 13.12        | 39.5                       | 32.8         |
| Construction                      | 59.7                                    | 68.0         | 54.9         | -12.2                      | 8.7          | 545.23                               | 520.73       | 15.02                         | 14.71        | 36.3                       | 35.4         |
| Building                          | 18.2                                    | 19.9         | 15.7         | -8.5                       | 15.8         | 483.76                               | 503.52       | 13.11                         | 13.72        | 36.9                       | 36.7         |
| Highway and Heavy                 | 7.9                                     | 12.7         | 6.4          | -37.6                      | 24.1         | 514.14                               | 478.93       | 13.53                         | 13.23        | 38.0                       | 36.2         |
| Special Trades                    | 33.6                                    | 35.4         | 32.8         | -5.3                       | 2.4          | 587.53                               | 548.68       | 16.55                         | 15.95        | 35.5                       | 34.4         |
| Transportation                    | 61.8                                    | 61.6         | 61.7         | 0.4                        | 0.3          |                                      |              |                               |              |                            |              |
| Railroads                         | 13.2                                    | 13.4         | 13.4         | -1.1                       | -1.4         | 540.09                               | 540.09       | 11.59                         | 11.59        | 46.6                       | 46.6         |
| Trucking and Warehousing          | 24.0                                    | 23.7         | 23.5         | 1.3                        | 2.1          | 431.80                               | 435.08       | 11.83                         | 11.92        | 36.5                       | 36.5         |
| Public Utilities                  | 33.2                                    | 33.2         | 33.5         | 0.1                        | -0.8         | 508.64                               | 509.92       | 12.78                         | 12.78        | 39.8                       | 39.9         |
| Communications                    | 19.0                                    | 19.0         | 19.4         | -0.1                       | -2.4         | 480.78                               | 480.39       | 12.08                         | 12.07        | 39.8                       | 39.8         |
| Elec., Gas and Sanitary           | 14.3                                    | 14.2         | 14.1         | 0.3                        | 1.3          | 538.73                               | 542.80       | 13.57                         | 13.57        | 39.7                       | 40.0         |
| Trade                             | 450.6                                   | 443.2        | 434.0        | 1.7                        | 3.8          | 228.90                               | 225.95       | 7.36                          | 7.36         | 31.1                       | 30.7         |
| Retail                            | 338.4                                   | 330.9        | 323.3        | 2.3                        | 4.7          | 184.15                               | 182.25       | 6.35                          | 6.35         | 29.0                       | 28.7         |
| General Merchandise               | 51.9                                    | 49.0         | 49.1         | 5.9                        | 5.6          | 168.48                               | 163.82       | 5.77                          | 5.83         | 29.2                       | 28.1         |
| Food Stores                       | 47.1                                    | 46.0         | 45.3         | 2.5                        | 3.9          | 213.28                               | 210.05       | 7.51                          | 7.37         | 28.4                       | 28.5         |
| Automotive                        | 35.0                                    | 34.6         | 33.4         | 1.2                        | 4.7          | 303.69                               | 302.88       | 8.12                          | 8.12         | 37.4                       | 37.3         |
| Eating and Drinking               | 107.0                                   | 107.1        | 104.1        | -0.1                       | 2.8          | 111.39                               | 111.39       | 4.72                          | 4.70         | 23.6                       | 23.7         |
| Wholesale                         | 112.2                                   | 112.2        | 110.7        | -0.1                       | 1.3          | 392.42                               | 385.44       | 10.14                         | 10.09        | 38.7                       | 38.2         |
| F.I.R.E.                          | 100.6                                   | 99.8         | 97.7         | 0.8                        | 2.9          |                                      |              |                               |              |                            |              |
| Finance                           | 48.3                                    | 47.8         | 46.0         | 1.0                        | 5.2          |                                      |              |                               |              |                            |              |
| Insurance                         | 36.0                                    | 35.8         | 35.4         | 0.6                        | 1.7          |                                      |              |                               |              |                            |              |
| Real Estate                       | 16.3                                    | 16.2         | 16.4         | 0.6                        | -0.6         |                                      |              |                               |              |                            |              |
| Service Industries                | 397.3                                   | 395.7        | 381.7        | 0.4                        | 4.1          |                                      |              |                               |              |                            |              |
| Hotel and Lodging                 | 20.5                                    | 20.5         | 19.3         | -0.1                       | 6.1          |                                      |              |                               |              |                            |              |
| Business Services                 | 61.0                                    | 60.6         | 57.6         | 0.6                        | 6.0          |                                      |              |                               |              |                            |              |
| Health Services                   | 135.8                                   | 135.6        | 133.4        | 0.1                        | 1.8          |                                      |              |                               |              |                            |              |
| Private Education                 | 24.8                                    | 24.8         | 24.4         | 0.3                        | 1.8          |                                      |              |                               |              |                            |              |
| Soc. Serv., Museums etc.          | 85.9                                    | 85.1         | 81.1         | 0.9                        | 5.8          |                                      |              |                               |              |                            |              |
| Government                        | 292.5                                   | 293.7        | 290.6        | -0.4                       | 0.6          |                                      |              |                               |              |                            |              |
| Federal                           | 30.2                                    | 30.1         | 30.1         | 0.4                        | 0.4          |                                      |              |                               |              |                            |              |
| State                             | 74.9                                    | 75.7         | 73.7         | -1.1                       | 1.7          |                                      |              |                               |              |                            |              |
| Local                             | 187.4                                   | 187.9        | 186.9        | -0.3                       | 0.3          |                                      |              |                               |              |                            |              |

<sup>1/</sup> Totals may not add because of rounding.

<sup>2/</sup> Includes Scientific Instruments and Miscellaneous Industries.

# Labor Force Data: State, SMSAs, and Counties

| Area or County                             | December, 1983 Prelim.       |        |             | Area or County          | December, 1983 Prelim.       |        |             |
|--------------------------------------------|------------------------------|--------|-------------|-------------------------|------------------------------|--------|-------------|
|                                            | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |                         | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |
| <u>State of Minnesota</u>                  | 2212830                      | 166387 | 7.5         | Lake                    | 4291                         | 1047   | 24.4        |
| <u>Metropolitan Areas</u>                  |                              |        |             | Lake of the Woods       | 1954                         | 204    | 10.4        |
| Duluth/Superior                            |                              |        |             | Le Sueur                | 11242                        | 1204   | 10.7        |
| (Duluth City Only)                         | 36283                        | 3881   | 10.7        | Lincoln                 | 3607                         | 280    | 7.8         |
| Fargo/Moorhead                             |                              |        |             | Lyon                    | 15466                        | 1399   | 9.0         |
| (Clay County, MN Only)                     | 29080                        | 1989   | 6.8         | McLeod                  | 16832                        | 1240   | 7.4         |
| Minneapolis/St. Paul SMSA <sup>2/</sup>    | 1219898                      | 68217  | 5.6         | Mahnomen                | 2789                         | 326    | 11.7        |
| Rochester SMSA <sup>3/</sup> (Olmsted Co.) | 62105                        | 3329   | 5.4         | Marshall                | 6464                         | 1002   | 15.5        |
| St. Cloud SMSA <sup>3/</sup>               | 80104                        | 7278   | 9.1         | Martin                  | 13488                        | 1013   | 7.5         |
|                                            |                              |        |             | Meeker                  | 10876                        | 1058   | 9.7         |
| <u>Counties</u>                            |                              |        |             | Mille Lacs              | 8803                         | 950    | 10.8        |
| Aitkin                                     | 5437                         | 951    | 17.5        | Morrison                | 12457                        | 1582   | 12.7        |
| Anoka                                      | 115932                       | 6905   | 6.0         | Mower                   | 18334                        | 1537   | 8.4         |
| Becker                                     | 11745                        | 1862   | 15.9        | Murray                  | 5991                         | 661    | 11.0        |
| Beltrami                                   | 16712                        | 1587   | 9.5         | Nicollet                | 14922                        | 854    | 5.7         |
| Benton                                     | 12394                        | 1158   | 9.3         | Nobles                  | 11937                        | 1040   | 8.7         |
| Big Stone                                  | 3858                         | 311    | 8.1         | Norman                  | 4456                         | 351    | 7.9         |
| Blue Earth                                 | 29104                        | 1774   | 6.1         | Olmsted                 | 62105                        | 3329   | 5.4         |
| Brown                                      | 15416                        | 1302   | 8.4         | Otter Tail              | 24323                        | 2491   | 10.2        |
| Carlton                                    | 12117                        | 1403   | 11.6        | Pennington              | 6580                         | 706    | 10.7        |
| Carver                                     | 21850                        | 1243   | 5.7         |                         |                              |        |             |
| Cass                                       | 9929                         | 1473   | 14.8        | Pine                    | 9725                         | 1309   | 13.5        |
| Chippewa                                   | 7144                         | 674    | 9.4         | Pipestone               | 5499                         | 362    | 6.6         |
| Chisago                                    | 15688                        | 1383   | 8.8         | Polk                    | 16150                        | 1310   | 8.1         |
| Clay                                       | 29080                        | 1989   | 6.8         | Pope                    | 5253                         | 539    | 10.3        |
| Clearwater                                 | 4003                         | 830    | 20.7        | Ramsey                  | 270540                       | 14779  | 5.5         |
| Cook                                       | 2191                         | 315    | 14.4        | Red Lake                | 2219                         | 417    | 18.8        |
| Cottonwood                                 | 7373                         | 519    | 7.0         | Redwood                 | 10471                        | 679    | 6.5         |
| Crow Wing                                  | 17524                        | 2180   | 12.4        | Renville                | 11569                        | 1012   | 8.7         |
| Dakota                                     | 115045                       | 7068   | 6.1         | Rice                    | 24331                        | 2215   | 9.1         |
| Dodge                                      | 8150                         | 732    | 9.0         | Rock                    | 5468                         | 298    | 5.4         |
| Douglas                                    | 13479                        | 1214   | 9.0         | Roseau                  | 5750                         | 782    | 13.6        |
| Faribault                                  | 10426                        | 827    | 7.9         | St. Louis (Inc. Duluth) | 93119                        | 15534  | 16.7        |
| Fillmore                                   | 12065                        | 1065   | 8.8         | Scott                   | 26230                        | 1875   | 7.1         |
| Freeborn                                   | 18265                        | 1870   | 10.2        | Sherburne               | 14649                        | 1307   | 8.9         |
| Goodhue                                    | 20028                        | 1495   | 7.5         | Sibley                  | 8222                         | 752    | 9.1         |
| Grant                                      | 3483                         | 300    | 8.6         | Stearns                 | 53061                        | 4813   | 9.1         |
| Hennepin                                   | 551377                       | 27704  | 5.0         | Steele                  | 16347                        | 1234   | 7.5         |
| Houston                                    | 10103                        | 762    | 7.5         | Stevens                 | 5705                         | 392    | 6.9         |
| Hubbard                                    | 5667                         | 817    | 14.4        | Swift                   | 6095                         | 586    | 9.6         |
| Isanti                                     | 10489                        | 992    | 9.5         | Todd                    | 11382                        | 1066   | 9.4         |
| Itasca                                     | 18336                        | 2827   | 15.4        | Traverse                | 2718                         | 235    | 8.6         |
| Jackson                                    | 7802                         | 465    | 6.0         | Wabasha                 | 9462                         | 920    | 9.7         |
| Kanabec                                    | 5469                         | 723    | 13.2        | Wadena                  | 5607                         | 623    | 11.1        |
| Kandiyohi                                  | 18643                        | 1621   | 8.7         | Waseca                  | 8861                         | 645    | 7.3         |
| Kittson                                    | 3386                         | 350    | 10.3        | Washington              | 67150                        | 3974   | 5.9         |
| Koochiching                                | 7767                         | 946    | 12.2        | Watsonwan               | 6849                         | 496    | 7.2         |
| Lac qui Parle                              | 5662                         | 396    | 7.0         | Wilkin                  | 4272                         | 305    | 7.1         |
|                                            |                              |        |             | Winona                  | 22669                        | 1706   | 7.5         |
|                                            |                              |        |             | Wright                  | 36086                        | 3286   | 9.1         |
|                                            |                              |        |             | Yellow Medicine         | 7315                         | 629    | 8.6         |

## Technical Notes:

1/ Labor force data is computed according to BLS methodology. The method includes an adjustment to assure that the sum of the substate areas equals the separately estimated State total. This adjustment is applied to all county and SMSA areas. County and area unemployment was multiplied by an adjustment factor of 1.55; employment was multiplied by 1.06. For a more detailed explanation see the Review of Labor and Economic Conditions, Vol. 4, No. 4, (February 1978 issue), p. 29.

2/ Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright Counties.

3/ Benton, Sherburne, and Stearns Counties.

# Selected Minnesota Program Statistics

## Characteristics of the Insured Unemployed

Tables 1 and 2 provide data on persons who filed a claim for unemployment compensation in Minnesota during the month. Only those claiming benefits from the regular State program are represented since data on the characteristics of Federal employees and veterans are not available.

The total number of claimants for unemployment benefits rose by 15,876 or 47.9 percent to a level of 48,762 in December. December's rise was slightly less than the average November to December percentage increase of the past five years. More than half of the December gain was among claimants in construction while nearly a fourth of the increase was due to larger numbers of claimants in manufacturing. Over-the-year, the number of claimants fell by 23,629 or 37.6 percent. Claimants were below their earlier levels for the tenth consecutive month in December. Over forty percent of the total decline in claimants from a year ago was in the manufacturing sector. The largest drop in percentage terms from a year earlier was in the mining industry where significant numbers of workers have exhausted their benefits.

Table 1. Distribution of Insured Unemployed, By Age and Sex, December, 1983

| Age Groups  | Number | Percent Distributions |            |                |
|-------------|--------|-----------------------|------------|----------------|
|             |        | Men of Totals         | Men of Men | Women of Women |
| TOTALS      | 48762  | 75.6                  | 100.0      | 100.0          |
| Under 45    | 37334  | 77.0                  | 78.1       | 72.0           |
| Under 25    | 9893   | 76.5                  | 20.5       | 19.5           |
| 25-34       | 17776  | 78.9                  | 38.1       | 31.5           |
| 35-44       | 9665   | 74.2                  | 19.5       | 21.0           |
| 45 and Over | 11428  | 70.8                  | 21.9       | 28.0           |
| 45-54       | 6541   | 72.2                  | 12.8       | 15.3           |
| 55 and Over | 4887   | 68.8                  | 9.1        | 12.7           |

Table 2. Distribution of Insured Unemployed By Industry and Occupation, December, 1983

| Industry and Occupational Attachment | Number | Percent of Total | Percent Long-Term Unemployed <sup>1/</sup> | Women as Percent of Total |
|--------------------------------------|--------|------------------|--------------------------------------------|---------------------------|
| Total, All Industries                | 48762  | 100.0            | 10.7                                       | 24.5                      |
| Ag., For., Fish.                     | 1549   | 3.2              | 4.1                                        | 11.6                      |
| Mining                               | 3457   | 7.1              | 3.7                                        | 4.6                       |
| Construction                         | 13673  | 28.0             | 2.4                                        | 3.3                       |
| Manufacturing                        | 11539  | 23.7             | 10.6                                       | 32.8                      |
| Pub. Utilities                       | 1845   | 3.8              | 10.8                                       | 13.5                      |
| Wholesale Trade                      | 2737   | 5.6              | 18.1                                       | 21.2                      |
| Retail Trade                         | 4808   | 9.8              | 19.2                                       | 40.2                      |
| Fin., Ins., Real Est.                | 942    | 1.9              | 28.4                                       | 51.1                      |
| Services                             | 6588   | 13.5             | 21.6                                       | 55.1                      |
| Public Admin.                        | 1253   | 2.6              | 9.7                                        | 34.2                      |
| Inf. Not Available                   | 371    | 0.8              | 2.1                                        | 11.6                      |
| Total, All Occupations               | 48762  | 100.0            | 10.7                                       | 24.5                      |
| Prof., Tech., Mgr.                   | 4527   | 9.3              | 30.2                                       | 38.1                      |
| Clerical                             | 4001   | 8.2              | 25.1                                       | 81.2                      |
| Sales                                | 1347   | 2.8              | 25.1                                       | 31.0                      |
| Services                             | 3302   | 6.8              | 16.2                                       | 58.3                      |
| Farm., For., Fish.                   | 1418   | 2.9              | 2.8                                        | 14.4                      |
| Processing                           | 2273   | 4.6              | 5.2                                        | 43.0                      |
| Machine Trades                       | 2298   | 4.7              | 12.6                                       | 11.2                      |
| Benchwork                            | 3861   | 7.9              | 9.6                                        | 52.1                      |
| Structural Work                      | 15148  | 31.1             | 3.4                                        | 2.2                       |
| Misc.                                | 10193  | 20.9             | 6.0                                        | 7.3                       |
| Inf. Not Available                   | 394    | 0.8              | 12.5                                       | 42.2                      |

<sup>1/</sup> Long-Term unemployed refers to unemployment insurance claimants whose current spell of unemployment has lasted 15 weeks or longer.

## Job Service Applicant Supply and Demand

Table 3 compares Job Service (J.S.) job applicants with the J.S. job openings that existed at the end of the month. These comparisons are expressed as supply/demand ratios. Other things being equal, the greater the ratio of applicants to openings, the greater the competition has been for work within that occupational category. To put these ratios into context, the reader must remember that not only do job seekers and employers in general find jobs or recruit workers through other means, but those interested in certain kinds of jobs are particularly unlikely to use the J.S. For example, workers seeking professional and Managerial jobs are least likely to use the J.S., whereas employers usually recruit construction workers through union halls and hire teachers directly. Thus, the main value of Table 3 is that it reflects, for broad occupational groups, the relative labor market conditions that those using the J.S. encountered when seeking work.

Table 3. Experienced Supply/Job Openings Demand<sup>1/</sup>

| Occupation          | Applicants (Supply) | Job Openings (Demand) | Supply/Demand Ratio |  |
|---------------------|---------------------|-----------------------|---------------------|--|
|                     |                     |                       |                     |  |
| Total               |                     |                       |                     |  |
| Prof., Tech., Mgr.  |                     |                       |                     |  |
| Clerical            |                     |                       |                     |  |
| Sales               |                     |                       |                     |  |
| Dom. Services       |                     |                       |                     |  |
| Other Services      |                     |                       |                     |  |
| Farm., Fish., For.  |                     |                       |                     |  |
| Processing          |                     |                       |                     |  |
| Machine Trades      |                     |                       |                     |  |
| Benchwork           |                     |                       |                     |  |
| Structural Work     |                     |                       |                     |  |
| Mtr. Frght., Trans. |                     |                       |                     |  |
| Pkg. & Mat. Hndlg.  |                     |                       |                     |  |
| Other               |                     |                       |                     |  |

Data for Table 3 is not available due to processing problems. This information will be included in future issues if it becomes available.

<sup>1/</sup> Inexperienced and improperly coded job applicants are not included in this table.

# CURRENT MINNESOTA LABOR MARKET CONDITIONS

March 1984 Supplement to The Review of Labor and Economic Conditions

Prepared by the Research and Statistical Services Office, MN Dept. of Economic Security, 390 N. Robert St., St. Paul MN 55101, in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics, and Employment and Training Admin.

## Nation

Although some of the economic news was not as favorable in February as in January, developments in most of the indicators, especially employment, unemployment and industrial production, show that the economy is still expanding at a vigorous pace. U.S. Commerce Department economists expect that real gross national product will grow at an annual rate of 3 percent in the first quarter of 1984.

The labor market continued its steady improvement in February as the unemployment rate fell further and both total and nonfarm payroll employment posted strong gains. The seasonally adjusted unemployment rate declined by 0.2 of a percentage point for the third consecutive month in February, dropping to 7.4 percent. Since the recession high, the rate has decreased by 2.4 percentage points. Total employment (seasonally adjusted) rose by a very strong 702,000 in February and has increased by 3.4 million during the recovery. Equally important, seasonally adjusted nonfarm payroll employment climbed by a healthy 386,000 in February and has risen by 3.5 million since the trough of the recession.

Other developments in February also indicated that the economy was still quite healthy. Industrial production rose 1.2 percent in both January and February after average monthly increases of 0.5 percent in the fourth quarter. Also, housing starts continued to rise at a fast rate, increasing by 11.2 percent in February after a gain of 14.7 percent in January.

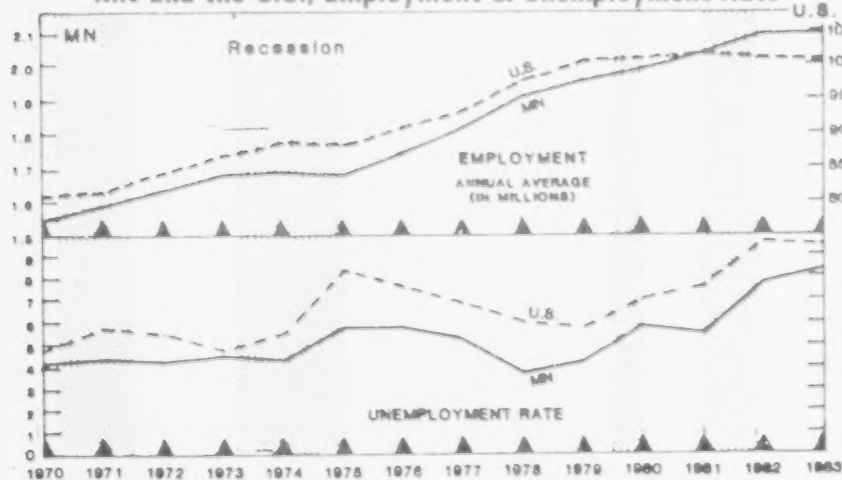
## State

The State's economy continued to improve in February but not as rapidly as in January. Although the unemployment rate fell considerably more than is normal for February, total employment did not increase as much as it usually does in February. Also, seasonally adjusted nonfarm payroll employment rose somewhat less than the average monthly gain of the last twelve months.

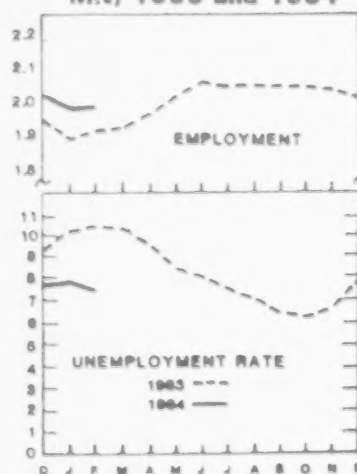
Minnesota's seasonally unadjusted unemployment rate dropped from 7.8 percent in January to 7.4 percent in February. The 0.4 of a percentage point decline in the rate suggested that there was real improvement in the unemployment picture because the drop compared with a 14 year average of practically no change between January and February. Although unadjusted total employment rose by only 0.3 percent in February, about half of the average gain for February, it was still substantially above (4.6 percent) the year earlier level. Meanwhile, seasonally adjusted nonfarm payroll employment climbed by a modest 4,300 in February after a strong gain of 12,400 in January. The largest over-the-month increases in adjusted payroll employment were in services (1,200), durable goods manufacturing (1,100) and mining (1,000). Since the recession low in December, 1982, payroll employment has risen by 81,100. The biggest employment gains during the recovery were in services (22,900), total manufacturing (20,700) and trade (17,300). However, total payroll employment is still below (13,500) the pre-recession high in January 1981.

| Labor Force Estimates | MINNESOTA<br>(Numbers in '000's) |          |                  | UNITED STATES<br>(Numbers in '000,000's) |          |                  |
|-----------------------|----------------------------------|----------|------------------|------------------------------------------|----------|------------------|
|                       | February<br>1984                 | Change   |                  | February<br>1984                         | Change   |                  |
|                       |                                  | Last Mo. | From<br>Year Ago |                                          | Last Mo. | From<br>Year Ago |
| Civilian Labor Force  | 2147.0                           | -2.3     | 21.4             | 111.4                                    | 0.3      | 1.7              |
| Employed              | 1989.0                           | 6.8      | 87.0             | 102.0                                    | 0.7      | 4.7              |
| Unemployed            | 158.0                            | -9.1     | -65.6            | 9.4                                      | -0.4     | -3.0             |
| Unemployment Rate     |                                  |          |                  |                                          |          |                  |
| Actual                | 7.4                              | -0.4     | -3.1             | 8.4                                      | -0.4     | -2.9             |
| Seasonally Adjusted   | n.a.                             | n.a.     | n.a.             | 7.8                                      | -0.2     | -2.6             |

MN and the U.S., Employment & Unemployment Rate



MN, 1983 and 1984





# Minnesota Nonagricultural Wage & Salary Employment, Hours, and Earnings

| INDUSTRY                          | EMPLOYMENT <sup>1/</sup><br>(thousands) |              |              | PER CENT<br>CHANGE<br>FROM |              | PRODUCTION WORKERS' HOURS & EARNINGS |              |                               |              |                            |              |
|-----------------------------------|-----------------------------------------|--------------|--------------|----------------------------|--------------|--------------------------------------|--------------|-------------------------------|--------------|----------------------------|--------------|
|                                   |                                         |              |              |                            |              | Average<br>Weekly<br>Earnings        |              | Average<br>Hourly<br>Earnings |              | Average<br>Weekly<br>Hours |              |
|                                   | Feb.<br>1923                            | Jan.<br>1924 | Feb.<br>1924 | Jan.<br>1923               | Feb.<br>1923 | Feb.<br>1924                         | Jan.<br>1924 | Feb.<br>1924                  | Jan.<br>1924 | Feb.<br>1924               | Jan.<br>1924 |
| TOTAL NONAGRICULTURAL             | 1719.1                                  | 1715.6       | 1680.7       | 0.5                        | 4.4          |                                      |              |                               |              |                            |              |
| MANUFACTURING                     | 946.4                                   | 948.0        | 936.9        | -1.4                       | 5.6          | 394.23                               | 394.36       | 9.71                          | 9.69         | 40.6                       | 40.7         |
| Durable Goods                     | 599.7                                   | 598.7        | 585.7        | -2.7                       | 6.9          | 405.91                               | 406.99       | 9.72                          | 9.76         | 41.5                       | 41.7         |
| Furniture, Lumber and Wood        | 14.9                                    | 14.4         | 11.7         | -2.3                       | 2.4          | 40.127                               | 401.90       | 10.21                         | 9.98         | 39.4                       | 40.2         |
| Stone, Clay and Glass             | 7.9                                     | 7.9          | 6.9          | -0.7                       | 15.6         | 374.02                               | 367.84       | 9.74                          | 9.68         | 38.4                       | 38.0         |
| Primary Metals                    | 5.7                                     | 5.7          | 5.0          | -0.8                       | 12.0         | 392.16                               | 384.57       | 9.72                          | 9.67         | 43.0                       | 42.4         |
| Fabricated Metals                 | 3.8                                     | 3.8          | 3.9          | -0.6                       | 7.7          | 441.53                               | 439.86       | 10.81                         | 10.84        | 41.4                       | 41.5         |
| Nonelectrical Machinery           | 44.7                                    | 43.6         | 37.1         | -3.7                       | 8.9          | 403.41                               | 406.17       | 10.01                         | 10.05        | 41.3                       | 42.4         |
| Electrical Machinery              | 20.8                                    | 20.4         | 14.8         | -1.8                       | 4.8          | 357.35                               | 365.74       | 8.47                          | 8.41         | 41.6                       | 41.3         |
| Transportation Equipment          | 6.9                                     | 6.6          | 5.4          | -4.5                       | 26.7         | 445.83                               | 470.17       | 10.49                         | 10.71        | 42.5                       | 43.9         |
| Other Durable Goods <sup>2/</sup> | 31.1                                    | 31.1         | 31.6         | 0                          | -1.5         | 375.65                               | 374.33       | 9.03                          | 9.02         | 41.6                       | 41.5         |
| Nondurable Goods                  | 146.1                                   | 149.3        | 139.1        | 2.6                        | 3.7          | 370.63                               | 377.78       | 9.61                          | 9.60         | 39.4                       | 39.3         |
| Food and Kindred                  | 49.0                                    | 47.8         | 43.3         | -2.4                       | -9.5         | 336.78                               | 339.70       | 8.68                          | 8.60         | 38.8                       | 39.5         |
| Textile and Apparel               | 4.9                                     | 4.8          | 4.6          | -1.0                       | 5.3          | 226.31                               | 229.21       | 6.10                          | 6.10         | 37.1                       | 36.1         |
| Paper and Allied                  | 31.7                                    | 31.6         | 31.8         | 0.3                        | 2.9          | 476.73                               | 479.16       | 11.01                         | 10.99        | 43.3                       | 43.6         |
| Printing and Publishing           | 37.6                                    | 37.6         | 35.1         | 0                          | 3.0          | 380.21                               | 374.11       | 10.36                         | 10.45        | 36.7                       | 35.8         |
| Chemical and Petroleum            | 9.7                                     | 9.1          | 9.1          | -1.3                       | 0.6          | 437.63                               | 426.12       | 10.70                         | 10.60        | 40.9                       | 40.2         |
| Rubber and Leather                | 17.8                                    | 17.4         | 11.3         | -3.8                       | 13.4         | 311.54                               | 310.31       | 8.05                          | 8.06         | 38.7                       | 38.5         |
| NONMANUFACTURING                  | 1172.6                                  | 1167.6       | 1319.8       | 0.5                        | 4.7          |                                      |              |                               |              |                            |              |
| Mining and Quarrying              | 8.8                                     | 7.9          | 7.5          | -1.3                       | 16.7         | 467.08                               | 467.36       | 12.80                         | 12.53        | 36.1                       | 36.9         |
| Metal Mining                      | 7.0                                     | 6.7          | 6.4          | -2.4                       | 16.4         | 484.46                               | 482.39       | 13.47                         | 13.10        | 36.1                       | 36.6         |
| Construction                      | 49.8                                    | 51.7         | 44.4         | -3.8                       | 12.1         | 569.60                               | 568.29       | 15.23                         | 15.09        | 37.4                       | 37.7         |
| Building                          | 15.6                                    | 16.3         | 13.5         | -4.3                       | 15.9         | 539.46                               | 514.37       | 14.58                         | 13.79        | 37.0                       | 37.3         |
| Highway and Heavy                 | 4.7                                     | 4.6          | 4.3          | -2.9                       | 5.4          | 408.30                               | 483.22       | 12.85                         | 13.06        | 38.0                       | 37.0         |
| Special Trades                    | 29.5                                    | 30.4         | 26.6         | -2.9                       | 10.8         | 600.85                               | 611.80       | 15.98                         | 16.10        | 37.6                       | 38.0         |
| Transportation                    | 56.4                                    | 58.4         | 56.9         | 0                          | 2.6          |                                      |              |                               |              |                            |              |
| Railroads                         | 10.1                                    | 10.4         | 10.6         | -2.9                       | -5.1         | 548.86                               | 548.86       | 11.88                         | 11.88        | 46.2                       | 46.2         |
| Trucking and Warehousing          | 23.2                                    | 23.1         | 22.1         | -0.4                       | 5.1          | 476.74                               | 427.01       | 11.92                         | 11.95        | 35.8                       | 35.8         |
| Public Utilities                  | 34.1                                    | 34.1         | 33.4         | -0.2                       | 2.0          | 507.20                               | 507.20       | 12.68                         | 12.68        | 40.0                       | 40.0         |
| Communications                    | 20.1                                    | 20.1         | 19.7         | 0                          | 2.0          | 468.86                               | 468.07       | 11.90                         | 11.88        | 39.4                       | 39.4         |
| Elec., Gas and Sanitary           | 14.0                                    | 14.1         | 13.8         | -0.4                       | 2.0          | 559.29                               | 555.70       | 13.61                         | 13.62        | 40.8                       | 40.8         |
| Trade                             | 423.5                                   | 426.6        | 408.5        | -0.7                       | 3.7          | 228.72                               | 230.51       | 7.45                          | 7.46         | 30.7                       | 30.9         |
| Retail                            | 314.7                                   | 317.3        | 303.0        | -0.8                       | 3.9          | 164.18                               | 164.54       | 6.44                          | 6.43         | 28.6                       | 26.7         |
| General Merchandise               | 45.9                                    | 47.2         | 43.0         | -2.7                       | 6.9          | 164.02                               | 162.53       | 5.90                          | 5.91         | 27.8                       | 27.5         |
| Food Stores                       | 47.5                                    | 43.8         | 44.5         | -0.8                       | -2.3         | 215.54                               | 213.36       | 7.51                          | 7.46         | 28.7                       | 28.6         |
| Automotive                        | 33.7                                    | 33.6         | 32.3         | -0.3                       | 4.1          | 299.92                               | 303.18       | 8.15                          | 8.15         | 36.8                       | 37.2         |
| Eating and Drinking               | 102.5                                   | 102.2        | 98.2         | -0.3                       | 4.3          | 117.13                               | 117.61       | 4.84                          | 4.84         | 24.2                       | 24.3         |
| Wholesale                         | 108.9                                   | 109.5        | 105.6        | -0.4                       | 3.1          | 386.97                               | 395.22       | 10.13                         | 10.16        | 38.2                       | 38.9         |
| F.I.R.E.                          | 101.6                                   | 101.4        | 98.1         | -0.1                       | 3.5          |                                      |              |                               |              |                            |              |
| Finance                           | 48.7                                    | 48.7         | 46.5         | 0.2                        | 4.9          |                                      |              |                               |              |                            |              |
| Insurance                         | 36.1                                    | 36.1         | 35.5         | -0.1                       | 1.9          |                                      |              |                               |              |                            |              |
| Real Estate                       | 16.7                                    | 16.6         | 16.2         | 0.6                        | 3.0          |                                      |              |                               |              |                            |              |
| Service Industries                | 398.6                                   | 395.0        | 377.7        | -0.9                       | 5.6          |                                      |              |                               |              |                            |              |
| Hotel and Lodging                 | 20.7                                    | 20.5         | 18.5         | 0.7                        | 12.0         |                                      |              |                               |              |                            |              |
| Business Services                 | 63.7                                    | 62.9         | 56.5         | 1.3                        | 12.8         |                                      |              |                               |              |                            |              |
| Health Services                   | 134.6                                   | 134.1        | 131.3        | 0.4                        | 2.4          |                                      |              |                               |              |                            |              |
| Private Education                 | 24.5                                    | 23.3         | 23.9         | 5.2                        | 2.5          |                                      |              |                               |              |                            |              |
| Soc. Serv., Museums etc.          | 86.8                                    | 86.1         | 82.0         | 0.8                        | 5.8          |                                      |              |                               |              |                            |              |
| Government                        | 299.8                                   | 293.1        | 293.3        | 2.3                        | 2.2          |                                      |              |                               |              |                            |              |
| Federal                           | 30.7                                    | 30.5         | 29.8         | 0.8                        | 2.9          |                                      |              |                               |              |                            |              |
| State                             | 76.3                                    | 74.2         | 74.2         | 2.9                        | 2.7          |                                      |              |                               |              |                            |              |
| Local                             | 192.9                                   | 188.5        | 189.2        | 2.4                        | 1.9          |                                      |              |                               |              |                            |              |

<sup>1/</sup> Totals may not add because of rounding.

<sup>2/</sup> Includes Scientific Instruments and Miscellaneous Industries.

# Labor Force Data: State, SMSAs, and Counties

| Area or County                           | February, 1984 Prelim.       |        |             | Area or County          | February, 1984 Prelim.       |        |             |
|------------------------------------------|------------------------------|--------|-------------|-------------------------|------------------------------|--------|-------------|
|                                          | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |                         | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |
| State of Minnesota                       | 2147029                      | 157495 | 7.4         | Lake                    | 4169                         | 862    | 20.7        |
| Metropolitan Areas                       |                              |        |             | Lake of the Woods       | 1812                         | 203    | 11.2        |
| Duluth/Superior<br>(Duluth City Only)    | 34962                        | 3896   | 11.1        | Le Sueur                | 11028                        | 1372   | 12.4        |
| Fargo/Moorhead<br>(Clay County, MN Only) | 27798                        | 1497   | 5.0         | Lincoln                 | 3641                         | 309    | 8.5         |
| Minneapolis/St. Paul SMSA <sup>2/</sup>  | 1185478                      | 62309  | 5.3         | Lyon                    | 14473                        | 998    | 6.9         |
| Rochester SMSA (Olmsted Co.)             | 58862                        | 2900   | 4.9         | McLeod                  | 16188                        | 1329   | 8.2         |
| St. Cloud SMSA <sup>2/</sup>             | 79480                        | 7252   | 9.2         | Mahnomen                | 2838                         | 355    | 12.5        |
| Counties                                 |                              |        |             | Marshall                | 6059                         | 998    | 16.5        |
| Aitkin                                   | 5383                         | 1208   | 22.4        | Martin                  | 13262                        | 942    | 7.1         |
| Anoka                                    | 112378                       | 6450   | 5.7         | Meeker                  | 10410                        | 1441   | 13.8        |
| Becker                                   | 12442                        | 2347   | 18.9        | Mille Lacs              | 8482                         | 940    | 11.1        |
| Beltrami                                 | 16051                        | 1623   | 10.1        | Morrison                | 12443                        | 1638   | 13.2        |
| Benton                                   | 12133                        | 1144   | 9.4         | Mower                   | 17921                        | 1457   | 8.1         |
| Big Stone                                | 3740                         | 375    | 9.0         | Murray                  | 5891                         | 676    | 10.6        |
| Blue Earth                               | 28213                        | 1689   | 6.0         | Nicollet                | 14519                        | 865    | 6.0         |
| Brown                                    | 14593                        | 1195   | 8.2         | Nobles                  | 11792                        | 1004   | 8.5         |
| Carlton                                  | 11753                        | 1524   | 13.0        | Norman                  | 4348                         | 378    | 8.7         |
| Carver                                   | 21528                        | 1425   | 6.6         | Olmsted                 | 58862                        | 2900   | 4.9         |
| Cass                                     | 9586                         | 1363   | 14.2        | Otter Tail              | 24362                        | 3156   | 13.0        |
| Chippewa                                 | 7335                         | 669    | 9.1         | Pennington              | 6304                         | 678    | 10.8        |
| Chisago                                  | 15452                        | 1501   | 9.7         | Pine                    | 9600                         | 1454   | 15.1        |
| Clay                                     | 27798                        | 1957   | 7.0         | Pipestone               | 5413                         | 349    | 6.4         |
| Clearwater                               | 4116                         | 1030   | 25.0        | Polk                    | 17307                        | 1465   | 8.5         |
| Cook                                     | 2149                         | 375    | 15.1        | Pope                    | 5189                         | 530    | 10.2        |
| Cottonwood                               | 7145                         | 504    | 7.1         | Ramsey                  | 262504                       | 13074  | 5.0         |
| Crow Wing                                | 16602                        | 2228   | 13.4        | Red Lake                | 2120                         | 384    | 18.1        |
| Dakota                                   | 111524                       | 6220   | 5.6         | Redwood                 | 10187                        | 681    | 6.7         |
| Dodge                                    | 7824                         | 865    | 11.1        | Renville                | 11026                        | 1044   | 9.5         |
| Douglas                                  | 12838                        | 1171   | 9.1         | Rice                    | 23758                        | 2125   | 8.9         |
| Faribault                                | 10020                        | 845    | 8.4         | Rock                    | 5502                         | 267    | 4.9         |
| Fillmore                                 | 11901                        | 1194   | 10.0        | Roseau                  | 5605                         | 869    | 15.5        |
| Freeborn                                 | 17469                        | 1806   | 10.3        | St. Louis (Inc. Duluth) | 85686                        | 11421  | 13.3        |
| Goodhue                                  | 19558                        | 1449   | 7.4         | Scott                   | 25662                        | 1909   | 7.4         |
| Grant                                    | 3378                         | 312    | 9.2         | Sherburne               | 14483                        | 1434   | 9.9         |
| Hennepin                                 | 535718                       | 25009  | 4.7         | Sibley                  | 8275                         | 784    | 9.5         |
| Houston                                  | 9780                         | 779    | 8.0         | Stearns                 | 51864                        | 4674   | 9.0         |
| Hubbard                                  | 5445                         | 901    | 16.5        | Steele                  | 16188                        | 1309   | 8.1         |
| Isanti                                   | 10321                        | 1007   | 9.8         | Stevens                 | 5717                         | 440    | 7.7         |
| Itasca                                   | 17020                        | 2411   | 14.2        | Swift                   | 6073                         | 586    | 9.6         |
| Jackson                                  | 7683                         | 478    | 6.2         | Todd                    | 11171                        | 1054   | 9.4         |
| Kanabec                                  | 5300                         | 741    | 14.0        | Traverse                | 2671                         | 244    | 9.1         |
| Kandiyohi                                | 17786                        | 1523   | 8.6         | Wabasha                 | 9090                         | 971    | 10.7        |
| Kittson                                  | 3276                         | 352    | 10.7        | Wadena                  | 5364                         | 641    | 12.0        |
| Koochiching                              | 7340                         | 859    | 11.7        | Waseca                  | 8727                         | 652    | 7.5         |
| Lac qui Parle                            | 5554                         | 407    | 7.3         | Washington              | 65197                        | 3586   | 5.5         |
|                                          |                              |        |             | Watonswan               | 6594                         | 544    | 8.2         |
|                                          |                              |        |             | Wilkin                  | 4142                         | 313    | 7.6         |
|                                          |                              |        |             | Winona                  | 22173                        | 2165   | 9.8         |
|                                          |                              |        |             | Wright                  | 35121                        | 3135   | 8.9         |
|                                          |                              |        |             | Yellow Medicine         | 7297                         | 599    | 8.2         |

## Technical Notes:

1/ Labor force data is computed according to BLS methodology. The method includes an adjustment to assure that the sum of the substate areas equals the separately estimated State total. This adjustment is Applied to all county and SMSA areas. County and area unemployment was multiplied by an adjustment factor of 1.44; employment was multiplied by 1.33. For a more detailed explanation see the Review of Labor and Economic Conditions, Vol. 4, No. 4, (February 1978 issue), p. 29.

2/ Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright Counties.

3/ Benton, Sherburne, and Stearns Counties.

# Selected Minnesota Program Statistics

## Characteristics of the Insured Unemployed

Tables 1 and 2 provide data on persons who filed a claim for unemployment compensation in Minnesota during the month. Only those claiming benefits from the regular State program are represented since data on the characteristics of Federal employees and veterans are not available.

In February, the total number of claimants for unemployment benefits dropped by 3,321 or 5.6 percent to 56,426. The February 1984 decline was the largest February decrease in both numerical and percentage terms since unduplicated counts of claimants were initiated in 1977. Over half of the drop in claimants in February was among claimants in the mining industry. The decline in mining claimants was the result of both recalls at taconite plants and workers exhausting their unemployment benefits. Larger than normal January to February reductions also occurred in wholesale and retail trade. Over the year, the total number of claimants fell by 27,157 or 32.8 percent. The steepest over-the-year decline was in manufacturing - over a third of the total decrease. The number of claimants has now been below year earlier levels for twelve consecutive months.

Table 1. Distribution of Insured Unemployed, By Age and Sex, February, 1984

| Age Groups  | Number | Percent Distributions |            |                |
|-------------|--------|-----------------------|------------|----------------|
|             |        | Men of Totals         | Men of Men | Women of Women |
| TOTALS      | 56426  | 78.1                  | 100.0      | 100.0          |
| Under 45    | 43367  | 79.2                  | 78.0       | 72.9           |
| Under 25    | 11246  | 78.0                  | 19.9       | 20.0           |
| 25-34       | 21302  | 61.1                  | 39.2       | 32.6           |
| 35-44       | 10819  | 76.9                  | 18.9       | 20.3           |
| 45 and Over | 13059  | 74.4                  | 22.0       | 27.1           |
| 45-54       | 7374   | 75.3                  | 12.6       | 14.7           |
| 55 and Over | 5685   | 73.2                  | 9.4        | 12.4           |

Table 2. Distribution of Insured Unemployed By Industry and Occupation, February, 1984

| Industry and Occupational Attachment | Number | Percent of Total | Percent Long-Term <sup>1/</sup> Unemployed | Women as Percent of Total |
|--------------------------------------|--------|------------------|--------------------------------------------|---------------------------|
| Total, All Industries                | 56426  | 100.0            | 13.9                                       | 22.0                      |
| Ag., For., Fish.                     | 1929   | 3.4              | 10.5                                       | 10.5                      |
| Mining                               | 1692   | 3.0              | 16.8                                       | 5.0                       |
| Construction                         | 19527  | 34.6             | 6.2                                        | 2.6                       |
| Manufacturing                        | 12700  | 22.5             | 14.8                                       | 31.8                      |
| Publ. Utilities                      | 2438   | 4.3              | 11.6                                       | 11.5                      |
| Wholesale Trade                      | 2951   | 5.2              | 19.2                                       | 21.3                      |
| Retail Trade                         | 5617   | 10.0             | 21.3                                       | 40.2                      |
| Fin., Ins., Real Est.                | 1005   | 1.8              | 26.4                                       | 48.2                      |
| Services                             | 6714   | 11.9             | 28.0                                       | 51.2                      |
| Publ. Admin.                         | 1269   | 2.3              | 23.3                                       | 27.4                      |
| Inf. Not Available                   | 584    | 1.0              | 1.2                                        | 20.7                      |
| Total, All Occupations               | 56426  | 100.0            | 13.9                                       | 22.0                      |
| Prof., Tech., Mgr.                   | 8722   | 8.4              | 26.7                                       | 37.6                      |
| Clerical                             | 3992   | 7.1              | 26.0                                       | 79.5                      |
| Sales                                | 1576   | 2.8              | 24.4                                       | 33.4                      |
| Services                             | 3345   | 5.9              | 25.1                                       | 50.7                      |
| Farm., For., Fish.                   | 1620   | 2.9              | 13.5                                       | 11.9                      |
| Processing                           | 3025   | 5.3              | 9.5                                        | 41.8                      |
| Machine Trades                       | 2582   | 4.6              | 18.3                                       | 11.1                      |
| Benchwork                            | 3893   | 6.9              | 16.9                                       | 51.7                      |
| Structural Work                      | 20747  | 36.8             | 7.3                                        | 1.6                       |
| Misc.                                | 10408  | 18.4             | 11.0                                       | 8.1                       |
| Inf. Not Available                   | 516    | 0.9              | 4.8                                        | 38.1                      |

<sup>1/</sup> Long-Term unemployed refers to unemployment insurance claimants whose current spell of unemployment has lasted 15 weeks or longer.

## Job Service Applicant Supply and Demand

Table 3 compares Job Service (J.S.) job applicants with the J.S. job openings that existed at the end of the month. These comparisons are expressed as supply/demand ratios. Other things being equal, the greater the ratio of applicants to openings, the greater the competition has been for work within that occupational category. To put these ratios into context, the reader must remember that not only do job seekers and employers in general find jobs or recruit workers through other means, but those interested in certain kinds of jobs are particularly unlikely to use the J.S. For example, workers seeking professional and Managerial jobs are least likely to use the J.S., whereas employers usually recruit construction workers through union halls and hire teachers directly. Thus, the main value of Table 3 is that it reflects, for broad occupational groups, the relative labor market conditions that those using the J.S. encountered when seeking work.

Table 3. Experienced Supply/Job Openings Demand<sup>1/</sup>

| Occupation          | Applicants (Supply) | Job Openings (Demand) | Supply/Demand Ratio |  |
|---------------------|---------------------|-----------------------|---------------------|--|
|                     |                     |                       |                     |  |
| Total               |                     |                       |                     |  |
| Prof., Tech., Mgr.  |                     |                       |                     |  |
| Clerical            |                     |                       |                     |  |
| Sales               |                     |                       |                     |  |
| Dom. Services       |                     |                       |                     |  |
| Other Services      |                     |                       |                     |  |
| Farm., Fish., For.  |                     |                       |                     |  |
| Processing          |                     |                       |                     |  |
| Machine Trades      |                     |                       |                     |  |
| Benchwork           |                     |                       |                     |  |
| Structural Work     |                     |                       |                     |  |
| Mtr. Frght., Trans. |                     |                       |                     |  |
| Pkg. & Mat. Hndlg.  |                     |                       |                     |  |
| Other               |                     |                       |                     |  |

<sup>1/</sup> Inexperienced and improperly coded job applicants are not included in this table.

# REVIEW OF LABOR AND ECONOMIC CONDITIONS

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All signed articles appearing in this publication together with the Editorial Comment represent the views of the author or editor and not necessarily those of the Department. Questions or comments to the authors may be directed to the Research and Statistical Services Office of the Minnesota Department of Economic Security, 390 N. Robert Street, St. Paul, Minnesota, 55101 or (612) 296-6545.

Comments and other correspondence concerning the publication should be addressed to the Editor.

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# Editorial Comment

## Some New Perspectives on Poverty

by R. Rindia

In the August 1983 issue of the Review, we referenced a Bureau of Census report which showed that if in-kind benefits were included as income, measures of the incidence of poverty would be significantly lower than the official estimates that are based on money income alone. Our purpose was to bring readers up-to-date on an issue that had been festering since the late 1960s and was about to break out in full scale debate. We also wanted readers to know that the substantial growth in in-kind benefits since the mid-1960s (when the poverty income threshold was first introduced) had put a new dimension on this debate. We now wish to bring the readers attention to two other dimensions of poverty that seem to merit further consideration and attention.

The first item to which we are alluding concerns persons whose income falls below the poverty threshold but who work full time. This has significance for two reasons; namely, the popular perception that only persons without jobs are poor, and the fact that the changing structure of the economy may generate some unanticipated and unsettling results in the future. Consumer Income Report #138, published by the Bureau of Census in 1983, provides data which indicates that in 1981 almost one-fourth of those persons 15 years of age and over whose incomes fell below the poverty threshold worked full time. Since both the very young and the old were included in these estimates, we restricted our attention to those 22 through 44 years of age. Here we found that over 37 percent who were poor worked full time. Restricting our analysis still further to males 22 through 44 years of age showed that almost 57 percent of the poor worked full time. Admittedly, many of these full time workers were employed less than 52 weeks in the year. However, over 45 percent of the males 22 through 44 years of age in poverty worked full time for 50 to 52 weeks of the year. Even more startling was the fact that almost 61 percent of white males 22 through 44 years of age who were poor worked full time; of whom 40 percent worked full time for 50 to 52 weeks of the year, while black males in the same age category fared considerably better.

Given the generally lower wages that prevail in the Service sector of the economy, and the projected faster growth of this sector relative to the other sectors, suggests that we may find an increasing number of the fully employed among those in poverty. Despite this potentially bleak picture, there is a countervailing element that provides a basis for some optimism. Here we refer to the relatively high turnover that occurs each year in the poverty population. For this view, we turn to another source of data.

The Panel Study of Income Dynamics of 5,000 American families has been conducted since 1968 by the Survey Research Center at the University of Michigan. This study provides useful information for measuring the turnover of the poverty population in the United States. Using data from this longitudinal study for the years 1969 to 1978, Greg Duncan, in his book, Years of Poverty-Years of Plenty, uses a definition of persistent poverty to measure turnover in the poverty population. He defines persistent poverty as those who were poor in at least eight of the ten years of the study period. Based on this definition, he found that only 2.6 percent of the population was persistently poor during the 1969-1978 period. This was in contrast to 24.4 percent of the population that experienced at least some poverty over the study period. For about 8.3 percent

of the population, poverty occurred intermittently for three to seven of the ten years. To quote Duncan, "Our analysis found substantial turnover in the poverty population during the 1969-1978 decade, with nearly one-quarter of the population poor at least once, but a very small fraction persistently poor". <sup>1/</sup>

In order to determine whether structural change or changes in economic conditions affected the turnover of the poverty population, Duncan divided the study period into two five-year segments, 1969 through 1973 and 1974 through 1978. Despite a more severe recession and changes in social policies in the latter period, Duncan found "...no perceptible changes in the structure of short-and longer-term poverty." <sup>2/</sup>

It should be noted that the results of the Panel Study of Income Dynamics challenges much of the conventional wisdom regarding economic mobility in the United States. The generally accepted assumption that people who are now poor, or alternatively affluent, will be so for a long time is not supported by the data from the longitudinal study. At the same time, however, the substantial turnover that exists with respect to the economic status of the population indicates that there are more people than generally recognized who need some form of social safety net at some point in their lives. Thus, over 25 percent of the families studied received public welfare at some time in the 1969-1978 period.

Returning to our earlier observation that a large portion of the population in poverty in 1981 was comprised of persons who worked full time, we find it alarming that by and large many of these people would not be lifted out of poverty even if their unemployment spells were completely eliminated. This is particularly true for those in the prime-age who are household heads. In short, while the incidence of persistent poverty is small, those who work for low wages do not stand much of a chance to escape poverty even if they worked full time for 50 to 52 weeks in every year.

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1/ Duncan, Greg J., *Years of Poverty-Years of Plenty*, Institute for Social Research, University of Michigan, Ann Arbor, 1984, p. 41.

2/ Ibid, p. 43.

# Research Summaries

## TRENDS IN EMPLOYEE BENEFITS

By B. Steuermann

Employee benefits are an important part of the total compensation an employee receives for working. Such benefits as vacations, pensions, and insurance contribute to worker well-being and security but also increase the cost of doing business. In the past 50 years the types and costs of employee benefits have increased dramatically. In 1929 there was no Old-Age, Survivors, Disability, and Health Insurance or Unemployment Insurance. Vacations and paid holidays were usually limited to office workers, with the one-week vacation common and considerably fewer paid holidays than today. The only legally required payments were workman's compensation and government employees retirement. Total benefits in 1929 are estimated to have cost \$1.5 billion or 2 percent of that year's \$59.4 billion in wages and salaries. In 1981, total benefits are estimated to have been 32.9 percent of wages and salaries and cost \$485 billion. This Research Summary uses data from the 1981 Employee Benefits Survey conducted by the Chamber of Commerce to show the cost of various employee benefits and how these costs have risen over time. The 1981 survey collected data from 994 companies.

The following table shows the specific types of employee benefits and their share of total benefit costs. Employee benefits vary widely from industry to industry. The petroleum industry paid employee benefits equal to 44.6 percent of payroll in 1981, while the benefits share of payroll of firms in wholesale and retail trade was 30.6 percent. Some negotiated benefits, such as life and health insurance and vacation and holiday pay, were paid by nearly all companies surveyed. Other items were paid by a smaller number of firms. For example, sick leave was paid by 83 percent, dental insurance premiums were paid by 51 percent of the firms, employee discounts on goods and services purchased from the company were paid by 18 percent, and 21 percent paid profit-sharing payments.

Percent Distribution of Employee Benefits, 1951-1981

| Type of Payment                                           | 1951  | 1961  | 1971  | 1981  | Change in<br>Percent Dist.<br>1951-1981 |
|-----------------------------------------------------------|-------|-------|-------|-------|-----------------------------------------|
| Legally required                                          | 22.0  | 24.3  | 27.7  | 29.5  | 7.5                                     |
| Old-age Survivors, Disability and Health Insurance (FICA) | 6.7   | 10.0  | 14.2  | 16.3  | 9.6                                     |
| Unemployment Compensation                                 | 6.7   | 5.2   | 2.7   | 3.1   | -3.6                                    |
| Workman's Compensation                                    | 4.0   | 3.3   | 3.8   | 2.8   | -1.2                                    |
| Government Employees Retirement                           | 4.0   | 4.8   | 5.8   | 6.5   | 2.5                                     |
| Other                                                     | 0.7   | 1.0   | 1.2   | 0.9   | 0.2                                     |
| Agreed Upon                                               | 18.0  | 21.9  | 22.7  | 25.2  | 7.2                                     |
| Pensions                                                  | 12.0  | 12.4  | 11.5  | 10.8  | -1.2                                    |
| Insurance                                                 | 4.7   | 8.1   | 10.0  | 12.9  | 8.2                                     |
| Other                                                     | 1.3   | 1.4   | 1.2   | 1.5   | 0.2                                     |
| Rest Period                                               | 16.7  | 15.2  | 13.8  | 11.7  | -5.0                                    |
| Time Not Worked                                           | 36.7  | 33.8  | 32.3  | 30.8  | -5.9                                    |
| Vacations                                                 | 20.0  | 18.1  | 16.5  | 15.7  | -4.3                                    |
| Holidays                                                  | 12.0  | 11.4  | 11.2  | 10.5  | -1.5                                    |
| Sick Leave                                                | 4.0   | 3.8   | 3.8   | 4.0   | 0.0                                     |
| Other                                                     | 0.7   | 0.5   | 0.8   | 0.6   | -0.1                                    |
| Bonuses and Profit-Sharing, etc.                          | 6.7   | 4.8   | 3.5   | 2.8   | -3.9                                    |
| Total Benefit Payments                                    | 100.0 | 100.0 | 100.0 | 100.0 |                                         |

Source: Employee Benefits 1981, Chamber of Commerce of the United States.



The cost for rest periods and time not worked, such as vacations and holidays, account for the largest share of employee benefit costs. However, between 1951 and 1981, costs for time off have not risen as rapidly as those for legally-required payments or pension and insurance, and, consequently, the share of employee benefit costs for time off has fallen from 53.4 percent in 1951 to 42.4 percent in 1981.

The following table shows the growth of employee benefits, from 1951 to 1981, as estimated by the Chamber of Commerce. From 1971 to 1981 the cost of benefits rose far more rapidly than wages and salaries or the prices of goods and services, as measured by the Consumer Price Index (CPI). The cost of benefits increased by 223.3 percent compared to a 160.6 percent increase in wages and salaries and a 74.5 percent increase in the CPI.

| Growth of Employee Benefits, 1951 to 1981<br>(Percent of Wages and Salaries)      |          |                   |          |            |
|-----------------------------------------------------------------------------------|----------|-------------------|----------|------------|
| Type of Payment                                                                   | 1951     | 1961              | 1971     | 1981       |
| Legally required                                                                  | 3.3      | 6.1               | 7.2      | 9.6        |
| Old-age, Survivors, Disability and Health Insurance (FICA)                        | 1.0      | 3.1               | 3.7      | 5.3        |
| Unemployment Compensation                                                         | 1.0      | 1.1               | 0.7      | 1.0        |
| Workmans Compensation                                                             | 0.6      | 0.7               | 1.0      | 0.9        |
| Government Employees Retirement                                                   | 0.6      | 1.0               | 1.5      | 2.1        |
| Other                                                                             | 0.1      | 0.2               | 0.3      | 0.3        |
| Agreed Upon                                                                       | 2.7      | 4.6               | 5.9      | 8.2        |
| Pensions                                                                          | 1.0      | 2.6               | 3.0      | 3.5        |
| Insurance                                                                         | 0.7      | 1.7               | 2.6      | 4.2        |
| Other                                                                             | 0.7      | 0.3               | 0.3      | 0.5        |
| Rest Period                                                                       | 2.0      | 3.5               | 3.6      | 3.8        |
| Time Not Worked                                                                   | 2.0      | 7.1               | 0.4      | 10.0       |
| Vacations                                                                         | 0.0      | 3.0               | 4.2      | 5.1        |
| Holidays                                                                          | 1.0      | 2.4               | 2.9      | 3.4        |
| Sick Leave                                                                        | 0.6      | 0.8               | 1.0      | 1.3        |
| Other                                                                             | 1.4      | 0.9               | 0.2      | 0.2        |
| Bonuses, Profit-Sharing, etc.                                                     | 1.0      | 1.0               | 0.9      | 0.9        |
| Total Benefit Payments                                                            | 16.0     | 21.0              | 26.0     | 37.5       |
|                                                                                   |          | (Billion dollars) |          |            |
| Wages and Salaries                                                                | \$ 171.1 | \$ 261.1          | \$ 371.4 | \$ 1,494.0 |
| Total Benefit                                                                     | \$ 26.0  | \$ 38.0           | \$ 190.0 | \$ 485.0   |
| Source: <u>Employee Benefits 1981</u> , Chamber of Commerce of the United States. |          |                   |          |            |

In the ten year period from 1971 to 1981, higher employee benefit costs have come primarily from increases in legally required benefits, especially FICA, and the insurance portion of agreed-upon programs.

# The Job Market

## EATING AND DRINKING ESTABLISHMENTS

By E. Jones

### Introduction

Employment in the Eating and Drinking Industry has shown strong gains over the past 24 years. Employment in this industry has more than tripled since 1960. It has also held up well during recessionary periods. This article will look at the Eating and Drinking Industry's composition, employment, occupational staffing patterns and outlook for the future.

### The Industry

The Eating and Drinking Industry, a part of the Retail Trade sector, includes retail establishments selling prepared foods and drinks for consumption on the premises, as well as lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption. Since establishments are classified by their predominant activity, restaurants, lunch counters, and drinking places are operated by hotels and department stores are classified in the hotel and department store categories, respectively, and are not included in this group.

There are approximately 6300 Eating and Drinking establishments in Minnesota employing 111,500 workers. This comprises 6.3 percent of the State's nonagricultural wage and salary employment. Forty-six percent of these establishments, employing 57.5 percent of the workers in this industry are employed in the Minneapolis-St. Paul nine-county area. Employment in this industry grew by 74.5 percent from 1970 to 1978 and is expected to increase by another 43.0 percent by 1990.

### Occupational Staffing Patterns

Over 77 percent of all employees in the Eating and Drinking Industry, as shown in Table I, are Service workers. The only other occupational group to comprise more than ten percent of employment is the Managerial group.

Among the Service workers, nearly 97 percent are food service workers, namely: Waiters and Waitresses (43.3 percent), Cooks & Chefs (27.2 percent), Bartenders (7.5 percent), Waiter's Assistants (5.2 percent), and Dishwashers (5.0 percent). Employment of Service workers in this industry is expected to increase at the same pace as total employment in Eating and Drinking Establishments.

There was a decrease in the proportion of Managerial workers in this industry from 1970 to 1978. Although the number of Managerial workers has increased and is expected to continue increasing, it will be at a slightly slower rate than some of the other occupational groups. Almost all of this group (96.7 percent) is classified as Managers of Bars and Restaurants.

Among the professional group, 74.5 percent are Musicians and other Entertainers. The increase in the Professional category can be attributed to the rise in the number and frequency of places that provide live entertainment for their patrons. Accountants are the only other Professionals of significance (18.8 percent) in this industry.

The proportion of Clerical workers in Eating and Drinking Establishments is on the rise. By 1985 almost six percent of the workers are expected to be Clerical workers. Cashiers account for 72.0 percent of the Clerical workers and Bookkeepers, 16.1 percent.

Among the Craft workers 61.8 percent are Bakers and 9.4 percent Painters. Delivery and Route workers make up 51.6 percent of the Operative Category. Other significant Operative occupations are Miscellaneous Machine Operators (15.0 percent), Meat Cutters and Butchers (9.4 percent), Packers and Wrappers (8.1 percent), and Truck Drivers (7.9 percent). The Laborer category consists mainly of Stock Handlers (70.3 percent) and Construction Laborers (7.8 percent).

### The Outlook

The outlook for employment in this industry is *very good*. In Minnesota employment is expected to grow at approximately one and one half times the rate of total employment from 1980 to 1990. Demand will increase as new restaurants, cafeterias, and bars open in response to population growth and increase spending for food and beverages outside the home. Higher average incomes and an increasing number of working women will also enable people to dine out more often. In addition to growth demand for these workers, hundreds of job openings will occur each year from high turnover, especially among students working part time.

Job opportunities exist almost every where and for almost any interested person, including those who have limited skills or little formal education. Experience is necessary, however, to obtain the higher paying positions in the larger restaurants or catering firms.

Table 2

| Occupational Staffing Patterns for Eating & Drinking Establishments |                     |      |      |
|---------------------------------------------------------------------|---------------------|------|------|
| Occupational Groups                                                 | Percent of Industry |      |      |
|                                                                     | 1980                | 1978 | 1985 |
| Professional & Technical                                            | 0.4                 | 1.4  | 1.4  |
| Managers, Officials, & Proprietors                                  | 13.8                | 11.7 | 10.9 |
| Sales                                                               | 0.8                 | 1.0  | 1.3  |
| Clerical                                                            | 4.0                 | 5.5  | 5.9  |
| Craft                                                               | 0.6                 | 0.7  | 0.7  |
| Operatives                                                          | 1.3                 | 1.8  | 2.0  |
| Service                                                             | 78.4                | 77.4 | 77.4 |
| Laborers except Farm                                                | 0.3                 | 0.4  | 0.4  |
| Farm Laborers                                                       | 0.0                 | 0.0  | 0.0  |

# SUPPLY/DEMAND FOR SPECIFIC OCCUPATIONS, APRIL, 1984<sup>1/2</sup>

By S. Hamper

## MINNESOTA

Shortage Occupations: commissioned sales persons#, experienced and highly skilled clerical workers#, food service workers, experienced auto and diesel mechanics

Surplus Occupations: entry-level managers, teachers#, entry-level clerical workers#, bookkeepers, welders#, truck drivers#, construction workers#, factory assemblers#, laborers#

## CENTRAL MINNESOTA

Shortage Occupations: data entry operators, experienced cooks, tool and die workers, experienced heavy equipment operators#, skilled auto mechanics, live-in farm workers

Surplus Occupations: nurses#, entry level clerical workers#, bookkeepers#, cashiers, carpenters, factory assemblers#, laborers#

## MINNEAPOLIS-ST. PAUL

Shortage Occupations: secretaries, highly skilled clerical workers#, food service workers

Surplus Occupations: entry level managers, teachers#, welders, truck drivers#, factory assemblers#, material movement handlers#, laborers#

## NORTHEASTERN MINNESOTA

Shortage Occupations: None

Surplus Occupations: entry level managers#, teachers#, social workers#, office clerks#, bookkeepers#, sales clerks#, waiters/waitresses#, cooks#, maids#, food production workers#, machinists#, welders#, heavy equipment operators#, maintenance mechanics#, diesel and auto mechanics#, truck drivers#, welders#, carpenters#, painters#, pipefitters#, millwrights#, bricklayers#, mining crafters#, laborers construction, general, and mining#

## NORTHWESTERN MINNESOTA

Shortage Occupations: commissioned sales persons#, experienced mechanical and electrical drafters, experienced office workers#, restaurant workers, domestic cleaners, experienced auto and diesel mechanics#, electricians#, finishing carpenters

Surplus Occupations: entry level clerical workers#, welders#, carpenters, local truck drivers#, construction workers#, factory assemblers, laborers#

## SOUTHERN MINNESOTA

Shortage Occupations: commissioned sales persons#, part-time clerical workers, part-time food preparation workers

Surplus Occupations: all occupations not listed as shortage occupations, especially entry level clerical workers# and general laborers#

Shortage occupations are those that are difficult to fill or go unfilled due to the lack of qualified applicants. Surplus occupations are those in which the number of qualified applicants greatly exceeds the number of openings.

1. An occupation has been listed as a shortage or surplus occupation if at least two out of the last three quarters of the review.



# Job Service Applicant Supply and Demand

Table 1 compares Job Service (J.S.) job applicants with the J.S. job openings that existed at the end of the month. These comparisons are expressed as supply/demand ratios. Other things being equal, the greater the ratio of applicants to openings, the greater the competition has been for work within that occupational category. To put these ratios into context, the reader must remember that not only do job seekers and employers in general find jobs or recruit workers through other means, but those interested in certain kinds of jobs are particularly unlikely to use the J.S. For example, workers seeking professional and managerial jobs are least likely to use the J.S., whereas employers usually recruit construction workers through union halls and hire teachers directly. Thus, the main value of Table 1 is that it reflects, for broad occupational groups, the relative labor market conditions that those using the J.S. encountered when seeking work. Readers who desire information on current shortage and surplus conditions for a specific occupation should refer to the Supply/Demand assessments given above.

Table 1. Experienced Supply/Job Openings Demand<sup>1/</sup>

| Occupation          | Applicants<br>(Supply)<br>April, 1984 | Job Openings<br>(Demand)<br>April, 1984 | Supply/Demand Ratio |             |
|---------------------|---------------------------------------|-----------------------------------------|---------------------|-------------|
|                     |                                       |                                         | April, 1984         | April, 1983 |
| Total               | 112,290                               | 13,144                                  | 8.5                 | 22.3        |
| Prof., Tech., Mgr.  | 13,175                                | 1,545                                   | 8.5                 | 26.2        |
| Clerical            | 17,982                                | 2,673                                   | 6.7                 | 18.6        |
| Sales               | 4,985                                 | 1,598                                   | 3.1                 | 5.8         |
| Dom. Services       | 1,580                                 | 172                                     | 9.2                 | 15.6        |
| Other Services      | 16,944                                | 2,952                                   | 5.7                 | 14.0        |
| Farm., Fish., For.  | 2,968                                 | 264                                     | 11.2                | 36.4        |
| Processing          | 2,682                                 | 506                                     | 5.3                 | 9.7         |
| Machine Trades      | 7,511                                 | 780                                     | 9.6                 | 77.6        |
| Benchwork           | 7,188                                 | 654                                     | 11.0                | 44.5        |
| Structural Work     | 16,864                                | 842                                     | 20.0                | 82.3        |
| Mtr. Frght., Trans. | 5,311                                 | 419                                     | 12.7                | 44.5        |
| Pkg. & Mat. Hndlg.  | 13,555                                | 680                                     | 19.9                | 18.4        |
| Other               | 7,545                                 | 59                                      | 26.2                | 177.1       |

<sup>1/</sup> Inexperienced and improperly coded job applicants are not included in this table.

# Feature Article

## CONTINUED TRENDS IN WAGES AND SALARIES IN MINNESOTA 1981 THROUGH 1983

By Ron Pederson\*

This essay is the fourth installment of a study examining wage and salary trends in Minnesota. <sup>1/</sup> The original study covered the period 1970-75, and focused on variations in the wage scale by occupations and differences in wages for occupations among different industries and geographic areas in Minnesota. Subsequently, the article was extended to cover the periods 1975-78, 1978-81, and now 1981-83. The extensions attempted to follow the original formats and data as closely as possible to promote continuity and comparability. Due to changes in the occupational configuration, some occupations have been dropped from the subsequent studies and occupational titles have been updated.<sup>2/</sup> Where occupations have been dropped the necessary re-calculations have been performed.

### I. General Trends in National and State Prices and Earnings

The decade of the 1970's was a period of rapidly increasing prices as measured by the Consumer Price Index (CPI). In contrast, the first few years of the 1980's indicate a deceleration of price increases. In 1970 the national CPI was measured at 116.3 while that of the Minneapolis - St. Paul SMSA was slightly higher at 117.5. By the end of calendar year 1983, the national CPI stood at 297.4, while that of the Minneapolis - St. Paul SMSA was measured at 310.9. In terms of annual averages, the national CPI increased by a rate of 12.0 percent, compared to a 12.7 percent for the Minneapolis - St. Paul SMSA, for the 13 year period 1970 to 1983.

For the more current period under review, 1981-83, the national CPI increased by 9.2 percent or an average annual increase of 4.6 percent. This compares very favorably with the high 13.1 percent annual rate of increase for the previous study period of 1978-81. Meanwhile, the Minneapolis - St. Paul CPI, like its national counterpart, continued to increase at a more modest rate in the more recent period. However, at a 5.7 percent annual average basis, it rose faster than the national CPI. Still, this was a sharp decline from the 12.5 percent average annual increase of the preceding 1978-81 period. The higher rate of increase in the CPI for the Minneapolis - St. Paul SMSA has widened the gap between the national and local index of consumer prices. For example in 1970 and 1975 the CPI's for the Nation and the Minneapolis - St. Paul SMSA were virtually identical. By 1983 the local CPI was 13.5 points greater. While the widening differential between the two CPI's may be attributed to a number of causes, our interest is primarily directed to evaluating their effect on real wages and wage drift.

<sup>1/</sup> The original article appeared in the Review of Labor and Economic Conditions, Second Quarter 1976, and was developed and written by Dr. R. Pinola, Director of the Research and Statistical Services Office. The subsequent updates appeared in the same publication, Second Quarter, 1979, and First Quarter, 1982.

<sup>2/</sup> The wage data used in this article were primarily taken from the Annual Salary Survey which is conducted by the Research and Statistical Services Office.

\* This article was prepared by Ron Pederson of the Research and Statistical Services Office of the Minnesota Department of Economic Security.

It should be noted that, wages, like the CPI, have increased over the period under review. 3/ Nationally, average weekly earnings for workers in the manufacturing sector increased at an annual average rate of 5.8 percent for the 1981-83 period. For the same period, the rate of increase for manufacturing workers in Minnesota was 7.3 percent. This is a stark reversal from the 1978-81 period when the annual average growth of the CPI substantially exceeded the annual average growth of wages in manufacturing on both the national and local levels. However, in retrospect, the period 1978-81 appears to be atypical since the previous years studied (1970-75, and 1975-78), exhibited much the same relationship as during the 1981-83 period. That is, the annual average growth of wages in manufacturing exceeded the annual average growth in the CPI.

Taking the entire 13 year (1970-83) period into consideration, the annual average increase in the manufacturing wage exceeded the annual average growth in the CPI by only .8 of a percent on the national level and .2 of a percent on the local level. In reality, the increase in wages was barely adequate to maintain a rough pace or balance with rising prices.

As noted in the previous installment, wage drift tends to move in tandem with price inflation, but this does not occur in all occupations or all industries. As will be explained in the next section, disparities exist between various occupations and industries when it comes to securing wage adjustments in response to consumer price changes.

## II. Wage and Salary Changes Among Occupations and Industries in Minnesota

Measurements of economic change such as those previously discussed above provide a general overview of some trends in the economy as a whole, but do not provide the detail concerning specific occupational earnings. However, data of this type is available through our Minnesota Salary Survey and BLS surveys for selected occupations. 4/ Using data from the Minnesota Salary Survey, Table I was prepared to show trends in the median monthly wage and its percentage change over the survey years for selected occupations. As noted earlier, wages, like prices, continued their general upward trend. The median survey wage increased 14.3 percent over the years 1981-83. This translates into a 7.2 percent annual median wage increase for the two year period. This is the first time period covered by this series of essays, where the annual median wage increase exceeded the average annual growth of local prices.

While this may be good news for the average working person, it should be noted that for the entire span of 13 years covered by our study, the annual average wage increase lagged behind the increase in prices.

3/ For this article weekly earnings data for Minnesota and the Nation were derived from the Federal-State cooperative survey program for Nonagricultural Wage and Salary Employment, Hours, and Earnings. These surveys are conducted monthly for the Bureau of Labor Statistics by the Research Offices of the State Employment Security Agencies and provide a continuing source of data on weekly earnings of production workers for selected industries. However, the program does not produce wage data by occupations. Therefore, the Research Office conducts an annual salary survey of Minnesota industry to estimate wage behaviour for approximately 160 occupations.

4/ There have been a number of changes in occupational titles since the original survey was conducted. The necessary updates have been made to reflect these changes.

Somewhat surprisingly, Table I reveals, that for the first time, the median wage of two of the sample occupations decreased. The noted occupations are Sewing Machine Operator and Security Guard. These two occupations have also consistently had the lowest median wage over the 13 year period under review by our study. While the exact cause of the decrease in the median wage is not known, we offer several plausible reasons. Since both occupations are relatively low on the skill level, it could be that the pool of applicants exceeded the available openings, thus allowing the wage to drop. Both occupations are also susceptible to sharp changes in the ranks of unemployed workers which have expanded during the past few years as a result of the contraction in economic activity. Additionally, pressures on the cost side from foreign competition in the Apparel industry have necessitated careful attention to wage rates by domestic producers.

On the upper end of the occupational ladder, 15 of the 25 occupations surveyed had median wages increasing faster than the overall median wage increase for the period 1981-83. This was especially gratifying news for workers in these occupations since the median wage grew at a rate greater than the local CPI. In total, 19 occupations had their median wages grow at a rate greater than the local CPI. As in the past, the occupations that had wages expanding in tandem with price increases, were those occupations with higher skill levels. Also, occupations traditionally having strong collective bargaining representatives, showed varying degrees of increase. They ranged from 23.2 percent for Carpenter, down to 5.9 percent for Heavy Equipment Operator over the 1981-83 period. However, for the entire 1970-83 period, we find the reverse occurring, that is Carpenter's median wages increased on an annual average basis by 6.9 percent while those of Heavy Equipment Operators registered a healthy 13.1 percent increase. It is interesting to note that our data does not reflect any wage rollbacks or give-backs except in regard to the occupations of Security Guard and Sewing Machine Operator. The downward adjustment of wages in collective bargaining may become more prevalent in the future as cost containment takes on more significance in the face of increased competition.

Generally, the annual average wage gains made during the 1981-83 period, have exceeded the corresponding increase in local prices. However, one may view the occupational wage increases as attempts to recover the ground lost to price increases during the previous decade. As noted on Table I, average median wage increases trailed price increases for the 1970-83 period. Thus, even with the more recent experience, price adjusted median wages in 1983 were, on average, lower than in 1970.

Structurally, little has changed on the occupational wage scale over the period 1970-83. This is shown in Table II where the indexes of median wages for the years 1970, 1975, 1978, 1981 and 1983 are provided for a representative sample of occupations. The indexes were computed using the median wage of laborer as the base. The table also includes the percentage increase or decrease in the index points for each period, as well as the standard deviations for the particular years under consideration. From Table II, it can be seen that the traditionally lower paid, less skilled occupations such as Security Guard and Clerical jobs remain on or near the bottom of the wage scale even though they experienced wage increases over the span of 13 years.





Table 11. Indexes of Median Wages for Selected Occupations in Minnesota, 1970, 1975, 1978, 1981, 1983

| Occupational Group                 | Indexes of Median Wages |       |       |       |       | Percent Decrease or Increase in Index Point |         |         |         |         |
|------------------------------------|-------------------------|-------|-------|-------|-------|---------------------------------------------|---------|---------|---------|---------|
|                                    | 1970                    | 1975  | 1978  | 1981  | 1983  | 1970-75                                     | 1975-78 | 1978-81 | 1981-83 | 1970-83 |
| Accountant II                      | 172.4                   | 196.4 | 187.2 | 161.6 | 164.5 | 13.9                                        | -4.7    | -13.7   | 1.8     | -4.6    |
| Chemist                            | 162.5                   | 170.0 | 154.4 | 146.6 | 144.5 | 4.6                                         | -9.2    | -5.0    | -1.4    | -11.1   |
| File Programmer II                 | 196.2                   | 197.6 | 179.7 | 150.4 | 154.5 | 0.7                                         | -9.1    | -16.3   | 2.7     | -21.2   |
| Engineer, Civil II                 | 214.5                   | 231.1 | 230.6 | 209.0 | 222.2 | 7.7                                         | -0.2    | -9.4    | 6.3     | 3.6     |
| Cashier - Teller                   | 72.6                    | 70.7  | 72.0  | 60.8  | 64.3  | -2.6                                        | 1.8     | -15.6   | 5.8     | -11.4   |
| Clerk III                          | 102.3                   | 98.8  | 105.8 | 93.1  | 92.5  | -3.4                                        | 7.1     | -12.0   | -0.6    | -9.6    |
| Stenographer II                    | 86.9                    | 97.1  | 92.2  | 82.9  | 87.8  | 11.7                                        | -5.1    | -10.1   | 5.9     | 1.0     |
| Typist, Experienced                | 77.9                    | 83.8  | 88.6  | 77.0  | 81.3  | 7.6                                         | 5.7     | -13.1   | 5.6     | 4.4     |
| Carpenter, Maintenance             | 215.0                   | 215.0 | 179.5 | 131.7 | 145.2 | 11.6                                        | -16.5   | -26.6   | 10.3    | -24.6   |
| Electrician, Maintenance           | 163.4                   | 180.5 | 172.4 | 161.6 | 162.3 | 10.5                                        | -4.5    | -6.3    | 0.4     | -0.7    |
| Machinist, Maintenance             | 145.0                   | 163.7 | 160.0 | 139.3 | 145.2 | 12.9                                        | -2.3    | -12.9   | 4.2     | 0.1     |
| Welder                             | 115.6                   | 129.0 | 135.3 | 125.1 | 125.6 | 11.6                                        | 4.9     | -7.5    | 0.4     | 8.7     |
| Drafter I                          | 124.6                   | 124.3 | 108.2 | 97.2  | 100.6 | -0.2                                        | -13.0   | -10.2   | 3.5     | -19.3   |
| Engineering Aide I                 | 122.1                   | 125.7 | 126.8 | 108.1 | 118.8 | 2.9                                         | 0.9     | -14.7   | 10.0    | -2.7    |
| Sewing Machine Operator            | 66.7                    | 75.4  | 73.3  | 61.4  | 53.8  | 13.0                                        | -2.8    | -16.2   | -12.4   | -19.3   |
| EDP Console Operator               | 102.3                   | 108.5 | 108.6 | 91.0  | 96.8  | 6.1                                         | 0.1     | -16.2   | 6.4     | -5.4    |
| Laborer                            | 100.0                   | 100.0 | 100.0 | 100.0 | 100.0 | ---                                         | ---     | ---     | ---     | ---     |
| Standard Deviation of Index Values | 44.9                    | 45.9  | 44.1  | 39.3  | 41.5  | ---                                         | ---     | ---     | ---     | ---     |

The high end of the occupational scale is still dominated by the types of jobs that require post-high school training or high level skills. A number of these occupations, especially the skilled crafts, are covered by strong and stable collective bargaining agreements. The stability of these agreements tend to keep the wage level high, even though demand may temporarily abate for the particular skills. In this context, the 1981-83 wage increases in the face of weak demand and moderating prices can be viewed as a temporary adjustment by strong bargaining agents to regain ground lost over the longer period. If this practice or experience continues, wages and prices will be in roughly the same relationship that existed prior to the recessionary and high inflation period of the late 1970's and early 1980's.

Table II shows that an increase in the indexes of wages occurred, in the 1981-83 period. This is in contrast to the compression in the structure of wages that occurred in the mid to late 1970's as evidenced by significant decreases in the indexes with high values in 1975. In a previous installment of this series of articles, it had been suggested that there may be a tendency for the wage structure to maintain a stable long-run relationship for these surveyed occupations because the high indexes of 1975 and 1978 were being compressed in 1981. Thus, the rapid increase in indexes in the earlier years was followed by an equally rapid decline. Now we see a slower increase, suggesting that the indexes may be steadying at a point which may be cautiously called near normal. Since the growth in wages and prices has slowed, we may be entering a period where the variation in indexes, as measured by the standard deviation, reflect long-term stability in relative wages to which we alluded previously.

Table II also displays the relative change in the index points for the indexes of median wages. For the 1981-83 period we see that all but three occupation wages had increases. This is in stark contrast to the 1978-81 period when all occupational groups registered decreases. This helps to further illustrate the readjustment of the wage scale as it re-establishes its relationship.

### III. Regional Wage Variations in Minnesota

The third and final table displays variations in occupational wage rates between geographic areas of Minnesota. Little has changed in the geographic variation of wages since our last update. The Metro region continues to exhibit median wages slightly greater than the statewide rate, and the Northeast (NE) maintained the approximate level of wage parity which it had obtained with the Metro area. In our last essay it was suggested that the NE may again drop behind the Metro due to the economic problems that were becoming more pervasive in the area. In retrospect, however, it may be too soon to see a permanent change in regional wage variations. The NE is dominated by large firms which, in turn, have strong collective bargaining agreements with labor. Since these agreements generally stipulate that the least senior workers are to be first laid-off, the higher paid, long-time workers remain on the payroll. This keeps the median wage rate on an equal footing with the Metro area.

Table 111. Variation in Occupational wage rates between geographic areas in Minnesota Expressed as a Percent of the Statewide Median Wage for the Individual Occupations, 1970, 1975, 1980, 1981 and 1983

| Occupation               | 1970 |     |     |        | 1975 |     |     |    | 1979   |     |     |    | 1981 |        |     |     | 1983 |    |        |     |
|--------------------------|------|-----|-----|--------|------|-----|-----|----|--------|-----|-----|----|------|--------|-----|-----|------|----|--------|-----|
|                          | M    | SE  | SW  | Metrol | N    | NE  | SE  | SW | Metrol | N   | NE  | SE | SW   | Metrol | N   | NE  | SE   | SW | Metrol | N   |
| Professional             | -    | -   | -   | -      | -    | -   | -   | -  | -      | -   | -   | -  | -    | -      | -   | -   | -    | -  | -      | -   |
| Accountant II            | 94   | 89  | 94  | 77     | 103  | 92  | 87  | 89 | 77     | 103 | 103 | 88 | 96   | 79     | 102 | 104 | 97   | 91 | 91     | 102 |
| Elc. Programmer II       | 93   | 75  | 96  | NA     | 100  | 94  | NA  | 90 | NA     | 102 | 102 | 96 | 89   | NA     | 101 | 102 | 111  | 86 | 79     | 73  |
| Engineer, Civil II       | 103  | NA  | 92  | 101    | 99   | 106 | NA  | 98 | NA     | 102 | 99  | NA | 102  | NA     | 100 | 106 | NA   | NA | NA     | 100 |
| Chemical                 |      |     |     |        |      |     |     |    |        |     |     |    |      |        |     |     |      |    |        |     |
| Chem. III                | 114  | 101 | 123 | 92     | 97   | 117 | 82  | 77 | 94     | 103 | 109 | 86 | 90   | 86     | 104 | 107 | 93   | 90 | 92     | 102 |
| Steamfitter II           | 106  | 93  | 86  | 90     | 101  | 94  | 78  | 84 | 90     | 102 | 106 | 88 | 88   | 80     | 103 | 106 | 87   | 89 | 87     | 102 |
| Tapster II               | 90   | 80  | 96  | 92     | 102  | 96  | 86  | 86 | 81     | 106 | 105 | 84 | 86   | 82     | 105 | 104 | 86   | 91 | 87     | 105 |
| Craft                    |      |     |     |        |      |     |     |    |        |     |     |    |      |        |     |     |      |    |        |     |
| Carpenter, Maintenance   | 92   | 76  | 93  | 91     | 118  | 85  | 97  | 63 | 49     | 106 | 83  | 64 | 78   | 71     | 109 | 99  | 78   | 78 | 73     | 119 |
| Electrician, Maintenance | 98   | 92  | 104 | 92     | 117  | 96  | 84  | 78 | 76     | 116 | 100 | 92 | 80   | 97     | 128 | 106 | 86   | 89 | 76     | 114 |
| Machinist, Maintenance   | 93   | 77  | 92  | 91     | 104  | 98  | 76  | 74 | 67     | 104 | 100 | 91 | 79   | 61     | 103 | 107 | 77   | 80 | 78     | 91  |
| Mechanic, Automotive     | 103  | 100 | 86  | 88     | 99   | 102 | 106 | 79 | 70     | 98  | 120 | 86 | 91   | 70     | 103 | 106 | 105  | 78 | 90     | 98  |
| Technical                |      |     |     |        |      |     |     |    |        |     |     |    |      |        |     |     |      |    |        |     |
| Printer I                | 102  | 99  | 94  | 92     | 102  | 105 | 102 | 93 | 86     | 103 | 107 | 80 | 86   | 82     | 102 | 103 | 87   | 91 | 82     | 102 |
| Engineer (incl. Aides)   | 104  | 76  | 92  | 100    | 102  | 102 | 89  | 88 | 86     | 102 | 103 | 80 | 88   | 92     | 102 | 102 | 98   | 99 | 89     | 105 |
| Laborer                  |      |     |     |        |      |     |     |    |        |     |     |    |      |        |     |     |      |    |        |     |
| Laborer                  | 102  | 93  | 92  | 91     | 105  | 106 | 86  | 93 | 87     | 106 | 106 | 91 | 84   | 84     | 105 | 110 | 89   | 88 | 98     | 99  |
| Laborer                  | 91   | 86  | 103 | 86     | 115  | 113 | 94  | 86 | 71     | 121 | 122 | 88 | 89   | 82     | 115 | 116 | 83   | 86 | 75     | 92  |



The NE region has also been noticeable for its lack of wage give-backs on the part of organized labor. Although this phenomena has been evidenced in such diverse industries as Air Transportation and Food Processing it has not been manifested in the Iron Ore industry. While a number of circumstances have combined to keep the median wage rate stable in this area of the state, they are of little consolation to the unemployed 5/

The other four geographic regions of the state had fluctuations within their respective areas, but remain in approximately the same relationship with each other as well as the Metro and NE areas. All four areas have a strong agricultural base, which traditionally tends to keep the wage level down. The areas also have a low level of unionization, hence the lack of strong and extensive collective bargaining tends to keep the wage level at a lower rate. It is interesting to note that the SE area, which has the most medium or large sized cities outside of the Twin Cities as well as the most industrial development, registered decreases in 8 of the 14 occupational groups. 6/ Contrasting this with the SW area, an area that may be termed predominantly agricultural, we see that 8 of the 14 occupations in the SW increased their percentage of the medium wage.

By types of occupation all four geographic areas showed increases in the median wage for janitor and laborer. These two occupations are generally regarded as having the lowest skill level. The remaining occupations had scattered increases and decreases which display no apparent pattern. All of this serves to indicate that when analyzing wage differentials by geographic area, one needs to examine many variables, the effect of which varies from area to area.

#### IV. Summary and Conclusion

As noted in Section I, the purpose of this series of essays is to periodically examine wage and salary trends in Minnesota as reflected by data from the Minnesota Salary Survey and other basic surveys. Our primary objectives are to: (1) compare wage behavior against inflationist tendencies in the economy; (2) consider whether wage differentials between occupations are increasing or decreasing; and (3) determine whether economic growth in the State is producing wage parity between regions.

We have seen that the rapid rate of growth in prices through the 1970's and early 1980's has begun to taper off. The growth in wages has been traced and compared to price increases over the 13 year period 1970 to 1983. Our findings show that wages remain in a rough equilibrium with prices, but that no substantial improvement has been made in closing the gap between the two for the survey period. In fact an erosion of

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5/ It should, of course, be noted that the problems of the Iron Ore Industry in Northeastern Minnesota are not simply related to costs in the mining industry, but also to the demand for domestically produced steel. Part of the latter problem is caused by lower cost foreign steel and part by the reduction in overall demand for steel due to substitutes and lower steel content in automobiles resulting from smaller, lighter vehicles.

6/ In contrast to the NE area, the SE area has experienced wage give-backs by various collective bargaining organizations. The give-backs occurred primarily in the full-time Food Processing industries.

(Continued on page 30. See: FEATURE ARTICLE)

# Brief Analysis Of Economic Conditions

## THE NATIONAL AND STATE ECONOMIES IN THE FIRST QUARTER

By E. Boyle

### Nation

After very slow growth in March, virtually all of the major economic indicators showed that the Nation's economy was growing at a fast rate in April. Except for the weak performance in March, the first quarter was quite strong.

Although the seasonally adjusted unemployment rate in April remained at 7.8 percent for the third straight month, seasonally adjusted total employment and non-farm payroll employment continued to rise through the first quarter and into April. Total employment rose a moderate 262,000 in April but has climbed by 1.5 million since December and by 5.4 million since the recession low. Also, the proportion of the working-age population with jobs, at 59.3 percent, was at its highest since 1979. Meanwhile, seasonally adjusted nonfarm payroll employment rose by a very strong 407,000 in April after a rather small gain of 149,000 in March. Payroll employment has risen by 1.3 million since December and by 4.1 million during the recovery. The largest employment gains since December were in services (423,000), manufacturing (381,000), and trade (209,000).

Other indicators also showed a very robust economy in April. Both retail sales and housing starts rose sharply in April after declines in earlier months, while industrial production increased significantly after small gains in February and March. Personal consumption expenditures also climbed strongly in April and personal income would have risen substantially if farm income had not declined.

### State

Although the labor force data showed only normal seasonal over-the-month improvement in April, the December to March and over-the-year changes in total employment and the unemployment rate were very encouraging. Also, the seasonally adjusted establishment data revealed substantial growth in industry wage and salary employment during the first quarter and very sharp increases in March and April.

The April drop of 0.6 of a percentage point in the seasonally unadjusted unemployment rate was identical to the average April decline of the past fourteen years while the April increase of 3.2 percent in unadjusted total employment was also exactly equal to the average long-term gain for April. The strength of the economic recovery is indicated by the unseasonal increase in total employment between December and March for the first time since state labor force estimates based on the new methodology began to be produced in 1970. Also, the unadjusted unemployment rate fell between December and March for only the second time in the past fourteen years. Meanwhile, seasonally adjusted nonfarm payroll employment rose by 29,900 during the first quarter, the biggest quarterly gain since the upturn began, pushing total payroll employment above the previous high of December 1979. However, it should be noted that only two industry sectors, Finance-Insurance-Real Estate and Services, had higher employment totals than in December 1979. Manufacturing employment still remains substantially below the levels reached in 1979, and jobs in the Mining sector are only about 60 percent of the corresponding month of 1979.

# Forecasts

## FORECASTS OF GNP AND MINNESOTA PAYROLL EMPLOYMENT

By D. Stone

There has been of late both the hope and the expectation for growth in real GNP to moderate. These forecasts are consistent with both. Two quarters ago we noted a slowing in the forecasted growth rate to 4.94 percent annual. The forecasted growth rate over the next four quarters exhibits a further reduction: down to 2.94 percent annual. (Our unpublished forecasts of interest rates on 91 day Treasury bills shows an increase of 0.74 percentage points for the same period.)

Minnesota payroll employment also shows reduced growth, down from the 5.09 percent rate noted two quarters ago to 4.44 percent. Growth in employment in the major industries is forecasted as follows: Construction (3.72%); Finance, Insurance and Real Estate (4.29%); Government (2.35%); Manufacturing (4.01%); Mining (3.80%); Services (5.71%); Trade (4.34%); and Transportation, Communications and Public Utilities (3.65%).

One quarter ahead percent forecast errors are consistent with the past except for Mining which we underforecast for the first time.

| Quarter   | Real GNP (Billions of 1972 Dollars) | MINNESOTA PAYROLL EMPLOYMENT, BY QUARTER<br>(In Thousands) |        |                       |               |                                                    |                            |                                   |          |            |
|-----------|-------------------------------------|------------------------------------------------------------|--------|-----------------------|---------------|----------------------------------------------------|----------------------------|-----------------------------------|----------|------------|
|           |                                     | Total Nonagricultural Wage & Salary                        | Mining | Contract Construction | Manufacturing | Transportation, Communications, & Public Utilities | Retail and Wholesale Trade | Finance, Insurance, & Real Estate | Services | Government |
| Current   |                                     |                                                            |        |                       |               |                                                    |                            |                                   |          |            |
| 1984-I    | 1606.00                             | 1727.79                                                    | 9.84   | 51.01                 | 350.14        | 92.90                                              | 426.48                     | 102.20                            | 348.51   | 297.27     |
| FORECASTS |                                     |                                                            |        |                       |               |                                                    |                            |                                   |          |            |
| 1984-II   | 1629.54                             | 1804.75                                                    | 11.05  | 65.16                 | 367.41        | 94.92                                              | 449.52                     | 104.89                            | 413.98   | 299.90     |
| 1984-III  | 1646.37                             | 1833.49                                                    | 11.05  | 76.59                 | 380.82        | 95.78                                              | 454.88                     | 106.64                            | 419.13   | 277.99     |
| 1984-IV   | 1657.79                             | 1861.02                                                    | 10.39  | 71.75                 | 375.50        | 98.96                                              | 461.80                     | 106.56                            | 424.49   | 301.65     |
| 1985-I    | 1668.68                             | 1816.96                                                    | 10.04  | 53.78                 | 370.21        | 96.26                                              | 448.70                     | 106.89                            | 421.67   | 304.24     |
| 1985-II   | 1677.52                             | 1894.86                                                    | 11.47  | 61.54                 | 376.93        | 98.39                                              | 469.02                     | 109.39                            | 437.63   | 306.95     |
| 1985-III  | 1686.72                             | 1906.18                                                    | 11.64  | 78.57                 | 382.03        | 98.62                                              | 471.20                     | 111.10                            | 441.32   | 285.72     |
| 1985-IV   | 1697.77                             | 1925.03                                                    | 11.00  | 72.60                 | 383.17        | 100.94                                             | 477.10                     | 110.82                            | 447.26   | 307.40     |
| 1986-I    | 1708.01                             | 1867.82                                                    | 10.43  | 58.44                 | 374.88        | 97.73                                              | 462.49                     | 110.93                            | 443.61   | 309.33     |

### NOTES

1. These forecasts are produced using the Vector Autoregression model developed for Research by Rao Aryaqant.
2. The concept of employment forecasted is that of Nonagricultural Wage and Salary employment. The count represents the number of jobs held since the data is generated from a survey of employer payroll records. Groups included are labor force employment, but excluded here are the self-employed, domestics, unpaid family workers, employees of nonprofit institutions, and those government workers not covered by unemployment insurance.
3. Employment forecasts are seasonally unadjusted values. GNP and IS seasonally adjusted.
4. Forecasts of major industry employment do not sum to the forecast of total wage and salary employment. This is due to random error in the forecasted values.
5. There is great diversity in the accuracy of our forecasts among the major industry division. More information on their accuracy can be obtained from the author on request.

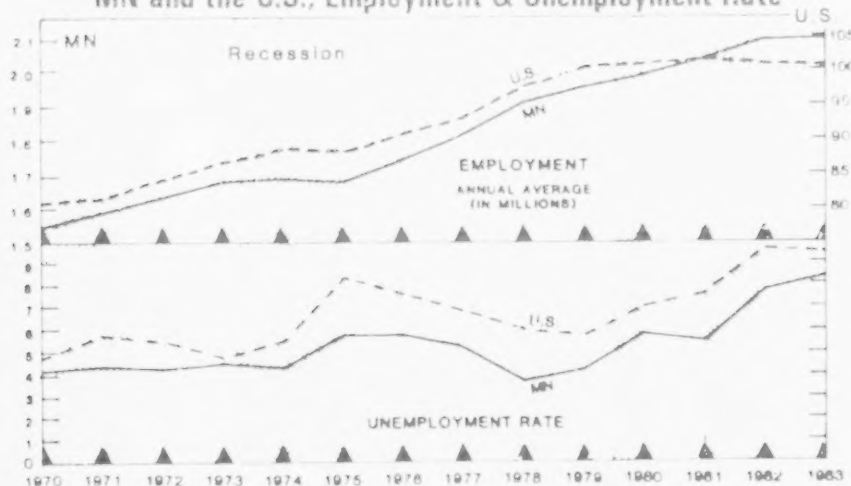
# Labor Force Statistics

| Labor Force Estimates | MINNESOTA<br>(Numbers in '000's) |          |          | UNITED STATES<br>(Numbers in '000,000's) |          |          |
|-----------------------|----------------------------------|----------|----------|------------------------------------------|----------|----------|
|                       | April<br>1984                    | Change   |          | April<br>1984                            | Change   |          |
|                       |                                  | Last Mo. | Year Ago |                                          | Last Mo. | Year Ago |
| Civilian Labor Force  | 2221.1                           | 55.4     | 48.1     | 112.1                                    | 0.4      | 2.3      |
| Employed              | 2076.0                           | 63.5     | 107.3    | 103.6                                    | 0.9      | 4.0      |
| Unemployed            | 145.1                            | -8.1     | -59.2    | 8.5                                      | -0.5     | -2.5     |
| Unemployment Rate     |                                  |          |          |                                          |          |          |
| Actual                | 6.5                              | -0.6     | -2.9     | 7.6                                      | -0.5     | -2.4     |
| Seasonally Adjusted   | n.a.                             | n.a.     | n.a.     | 7.8                                      | 0.0      | -2.4     |

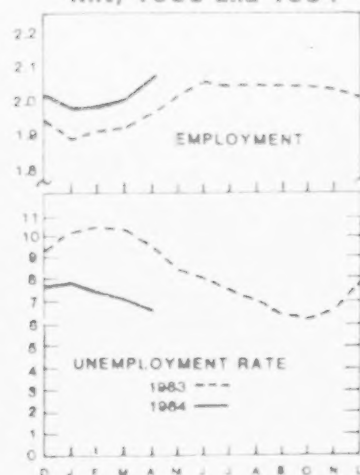
## Historical Labor Force Series

| Year | Minnesota<br>(Annual Average in '000's) |            |              |      | United States<br>(Annual Average in '000,000's) |            |              |      |
|------|-----------------------------------------|------------|--------------|------|-------------------------------------------------|------------|--------------|------|
|      | Labor Force                             | Employment | Unemployment |      | Labor Force                                     | Employment | Unemployment |      |
|      |                                         |            | Number       | Rate |                                                 |            | Number       | Rate |
| 1970 | 1625.0                                  | 1557.0     | 68.0         | 4.2  | 82.8                                            | 78.7       | 4.1          | 4.9  |
| 1971 | 1665.0                                  | 1593.0     | 72.0         | 4.4  | 84.4                                            | 79.4       | 5.0          | 5.9  |
| 1972 | 1709.0                                  | 1635.0     | 74.0         | 4.3  | 87.0                                            | 82.2       | 4.9          | 5.6  |
| 1973 | 1774.0                                  | 1694.0     | 80.0         | 4.5  | 89.4                                            | 85.1       | 4.4          | 4.9  |
| 1974 | 1779.0                                  | 1701.0     | 78.0         | 4.3  | 91.9                                            | 86.8       | 5.2          | 5.6  |
| 1975 | 1804.0                                  | 1697.0     | 107.0        | 5.9  | 93.8                                            | 85.8       | 7.9          | 8.5  |
| 1976 | 1849.0                                  | 1739.0     | 109.0        | 5.9  | 96.2                                            | 88.8       | 7.4          | 7.7  |
| 1977 | 1907.0                                  | 1809.0     | 97.0         | 5.1  | 99.0                                            | 92.0       | 7.0          | 7.1  |
| 1978 | 1979.0                                  | 1903.0     | 75.0         | 3.8  | 102.3                                           | 96.0       | 6.2          | 6.1  |
| 1979 | 2038.0                                  | 1953.0     | 85.0         | 4.2  | 105.0                                           | 98.8       | 6.1          | 5.8  |
| 1980 | 2159.0                                  | 1992.0     | 125.0        | 5.9  | 106.9                                           | 99.3       | 7.6          | 7.1  |
| 1981 | 2153.0                                  | 1984.0     | 114.0        | 5.5  | 108.7                                           | 100.4      | 8.3          | 7.0  |
| 1982 | 2166.0                                  | 1996.0     | 169.0        | 7.8  | 111.2                                           | 99.5       | 10.7         | 9.7  |
| 1983 | 2114.0                                  | 1947.0     | 177.0        | 8.4  | 111.5                                           | 100.8      | 10.7         | 9.6  |

MN and the U.S., Employment & Unemployment Rate



MN, 1983 and 1984





# Labor Market Conditions

The table and graphs in this section describe the behavior of the market for labor services in terms of its quantity, price, and supply. The quantity of labor services, which is the number of employed persons, is classified by industry. The price of labor services is roughly indicated by the industry wage.

Unemployment estimates provide a qualified measure of excess labor supply. The degree to which persons participate in the labor market and the effectiveness of the market in utilizing labor services are indicated by Labor Force Estimates and by Other Rates of Labor Utilization.

| Labor Force<br>And Establishment Data              | MINNESOTA<br>(Numbers in '000's) |                        |          | UNITED STATES<br>(Numbers in '000's)                                      |                        |          |
|----------------------------------------------------|----------------------------------|------------------------|----------|---------------------------------------------------------------------------|------------------------|----------|
|                                                    | 1 Qtr.<br>1984                   | Percent Change<br>From |          | 1 Qtr.<br>1984                                                            | Percent Change<br>From |          |
|                                                    |                                  | Last Qtr.              | Year Ago |                                                                           | Last Qtr.              | Year Ago |
| <b>LABOR FORCE ESTIMATES</b>                       |                                  |                        |          |                                                                           |                        |          |
| Total Labor Force                                  | 2158.8                           | -2.1                   | 1.4      | 111407                                                                    | -0.5                   | 1.5      |
| Employment                                         | 1993.8                           | -2.7                   | 1.8      | 102009                                                                    | -0.8                   | 4.6      |
| Nonagricultural                                    | n.a.                             | n.a.                   | n.a.     | 99155                                                                     | -0.5                   | 4.8      |
| Agricultural                                       | n.a.                             | n.a.                   | n.a.     | 2845                                                                      | -10.3                  | -2.5     |
| Unemployment                                       | 159.0                            | 6.5                    | -27.7    | 9406                                                                      | -2.6                   | -23.3    |
| By Reason - New Entrants*                          | n.a.                             | n.a.                   | n.a.     | 37.5                                                                      | 5.5                    | 16.7     |
| By Reason - Depart.*                               | n.a.                             | n.a.                   | n.a.     | 8.8                                                                       | -2.2                   | 18.9     |
| By Reason - Exit**                                 | n.a.                             | n.a.                   | n.a.     | 53.4                                                                      | -3.3                   | -11.1    |
| Unemployment Rates -                               |                                  |                        |          |                                                                           |                        |          |
| Actual                                             | 7.4                              | 7.5                    | -28.8    | 8.4                                                                       | 2.4                    | -25.0    |
| Seasonally Adjusted                                | n.a.                             | n.a.                   | n.a.     | 7.8                                                                       | -7.1                   | -23.5    |
| <b>OTHER RATES OF LABOR UTILIZATION</b>            |                                  |                        |          |                                                                           |                        |          |
| Participation Rate (Labor Force/Population 16+)    | n.a.                             | n.a.                   | n.a.     | 64.4                                                                      | 0.0                    | 0.5      |
| Full Employment Deficit - Percent of Workers†      | 4.4                              | 3.9a                   | 6.4a     | 4.4                                                                       | 4.2a                   | 7.2a     |
| Manpower Utilization Rate†                         | 88.8                             | -0.1                   | 3.2      | 82.5                                                                      | 0.9                    | 4.4      |
| <b>NONAGRICULTURAL WAGE AND SALARIED POSITIONS</b> |                                  |                        |          |                                                                           |                        |          |
| Employment                                         | 1863.8                           | 1.2                    | 4.5      | 98255                                                                     | 1.0                    | 3.9      |
| Mining                                             | 9.3                              | 19.7                   | 16.3     | 1052                                                                      | 0.7                    | 3.2      |
| Construction                                       | 84.7                             | 2.9                    | 17.6     | 4194                                                                      | 2.8                    | 9.9      |
| Manufacturing                                      | 356.9                            | 1.7                    | 5.6      | 19477                                                                     | 1.6                    | 6.7      |
| Durables                                           | 212.8                            | 1.3                    | 3.2      | 11552                                                                     | 2.0                    | 8.9      |
| Nondurables                                        | 144.1                            | 2.1                    | 7.3      | 7925                                                                      | 0.9                    | 3.6      |
| Trans., Comm., & Public Utilities                  | 44.1                             | 0.4                    | 2.4      | 5762                                                                      | 0.9                    | 2.9      |
| Trade                                              | 433.7                            | 2.2                    | 5.7      | 20903                                                                     | 0.8                    | 2.9      |
| Fin., Ins., & Real Estate                          | 209.3                            | 0.5                    | 3.8      | 5563                                                                      | 0.9                    | 3.3      |
| Services                                           | 485.7                            | 1.2                    | 5.3      | 26736                                                                     | 1.1                    | 4.9      |
| Average Weekly Wage**                              | 411.5                            | 0.2                    | 1.1      | 3178                                                                      | -0.1                   | 0.1      |
| Mining                                             | 31.1                             | 1.1                    | 1.4      | 43.1                                                                      | -0.2                   | 2.9      |
| Construction                                       | 41.1                             | 4.1                    | 1.1      | 36.6                                                                      | -0.5                   | 1.1      |
| Manufacturing                                      | 40.8                             | 0.9                    | 3.1      | 40.8                                                                      | 0.5                    | 3.3      |
| Durables                                           | 41.5                             | 1.0                    | 3.2      | 41.5                                                                      | 0.7                    | 4.0      |
| Nondurables                                        | 39.3                             | 0.5                    | 2.3      | 39.9                                                                      | 0.5                    | 2.6      |
| Trans., Comm., & Public Utilities                  | 38.0                             | -2.1                   | 0.0      | 39.3                                                                      | 0.0                    | 1.6      |
| Trade                                              | 40.2                             | -2.8                   | 1.3      | 32.1                                                                      | -0.3                   | 1.3      |
| Fin., Ins., & Real Estate                          | 41.4                             | n.a.                   | n.a.     | 36.4                                                                      | 0.6                    | 0.6      |
| Services                                           | 40.8                             | n.a.                   | n.a.     | 32.7                                                                      | 0.0                    | 0.0      |
| Average Hourly Wage                                |                                  |                        |          |                                                                           |                        |          |
| Mining                                             | 12.80                            | 6.8                    | -1.2     | 11.53                                                                     | 1.1                    | 2.8      |
| Construction                                       | 15.24                            | 3.9                    | 3.9      | 12.00                                                                     | 0.2                    | 0.3      |
| Manufacturing                                      | 9.64                             | -0.2                   | 2.1      | 9.09                                                                      | 1.1                    | 4.1      |
| Durables                                           | 9.73                             | -0.2                   | 2.6      | 9.67                                                                      | 1.2                    | 4.1      |
| Nondurables                                        | 9.57                             | 0.3                    | 1.4      | 8.26                                                                      | 1.0                    | 1.4      |
| Trans., Comm., & Public Utilities                  | 11.70                            | 0.3                    | 3.2      | 11.02                                                                     | 0.5                    | 3.1      |
| Trade                                              | 7.52                             | 2.5                    | 3.6      | 6.70                                                                      | 2.0                    | 4.2      |
| Fin., Ins., & Real Estate                          | n.a.                             | n.a.                   | n.a.     | 7.53                                                                      | 1.5                    | 4.6      |
| Services                                           | n.a.                             | n.a.                   | n.a.     | 7.52                                                                      | 1.5                    | 4.7      |
| Estimates of Labor Turnover (Mfg. Only)            |                                  |                        |          | Estimates of Labor Turnover have been discontinued as of January 1, 1982. |                        |          |

(a) Values are numerical values, not percent changes.

# Labor Market Conditions

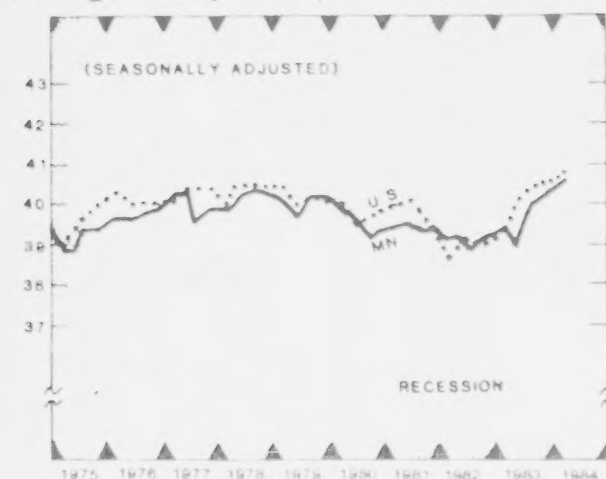
## Ratio of Service to Goods Producing Jobs



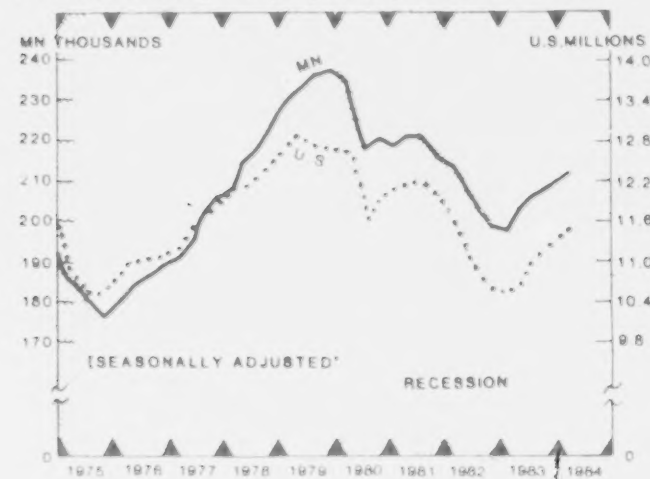
## Manpower Utilization Rate



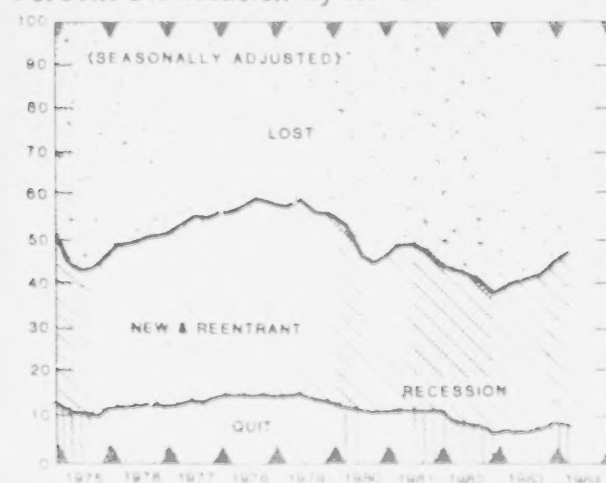
## Average Weekly Hours, Manufacturing



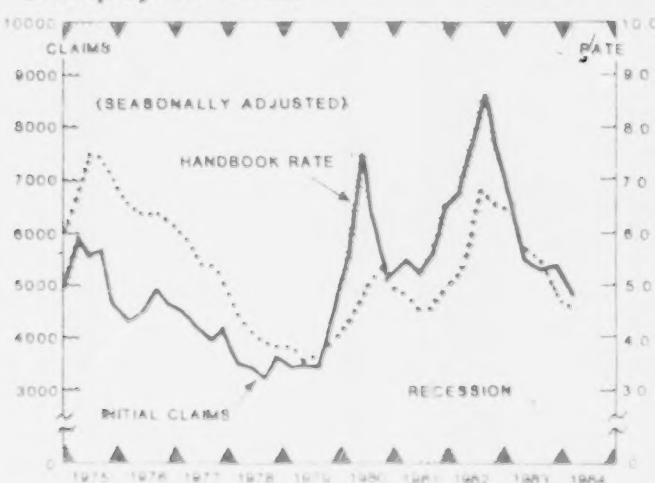
## Manufacturing Employment, Durable Goods



## U.S. Unemployment: Percent Distribution by Reason



## MN Weekly Initial Claims & Handbook Unemployment Rate<sup>1</sup>



# Labor Market Conditions

The table below provides data on persons who file claims for unemployment compensation in Minnesota. Only those claiming benefits from the regular State program are represented, since data on the characteristics of federal employees and veterans are not available, and data on those receiving benefits from

extended programs is reported only when those programs are in effect. If those receiving extended benefits were included they would distort the numerical comparisons over time, but would not substantially change the percentage distributions other than to increase the proportion of long-term unemployed.

| Persons Claiming Benefits | First Quarter 1984 |                     |          | April 1984 |                     |          | Percent Long Term |
|---------------------------|--------------------|---------------------|----------|------------|---------------------|----------|-------------------|
|                           | Number             | Percent Change From |          | Number     | Percent Change From |          |                   |
|                           |                    | Last Qtr.           | Year Ago |            | Month Ago           | Year Ago |                   |
| <b>By Age &amp; Sex</b>   |                    |                     |          |            |                     |          |                   |
| Male                      | 43654              | 69.3                | -29.9    | 31424      | -22.9               | -32.0    | 29.8              |
| Under 45                  | 34005              | 71.7                | -30.2    | 24036      | -23.8               | -33.3    | 29.8              |
| Under 25                  | 8631               | 75.9                | -26.8    | 5599       | -27.6               | -39.3    | 32.8              |
| 25-34                     | 17050              | 75.8                | -26.1    | 12227      | -23.3               | -32.8    | 28.6              |
| 35-44                     | 8304               | 60.1                | -26.5    | 6713       | -21.0               | -27.8    | 29.3              |
| 45 and Over               | 9649               | 61.1                | -28.7    | 7388       | -20.1               | -27.6    | 29.8              |
| 45-54                     | 5508               | 58.8                | -28.6    | 4088       | -21.9               | -28.0    | 28.8              |
| 55 and Over               | 4141               | 64.3                | -28.8    | 3300       | -17.8               | -27.1    | 31.1              |
| Female                    | 17486              | 16.7                | -36.9    | 10901      | -5.0                | -29.9    | 24.3              |
| Under 45                  | 9957               | 15.5                | -38.0    | 7917       | -4.5                | -30.7    | 23.2              |
| Under 25                  | 2452               | 19.5                | -43.7    | 1997       | -8.0                | -34.8    | 22.1              |
| 25-34                     | 4028               | 14.9                | -36.1    | 3586       | -3.2                | -29.9    | 24.2              |
| 35-44                     | 2567               | 12.8                | -34.7    | 2334       | -3.2                | -28.2    | 22.6              |
| 45 and Over               | 3429               | 19.9                | -33.8    | 2994       | -6.3                | -27.4    | 27.3              |
| 45-54                     | 1951               | 16.6                | -35.4    | 1601       | -6.2                | -30.0    | 23.8              |
| 55 and Over               | 1578               | 24.1                | -31.7    | 1383       | -6.4                | -24.2    | 31.4              |
| <b>By Industry</b>        | 56140              | 53.8                | -31.6    | 42325      | -19.0               | -31.5    | 28.4              |
| Ag., For., Fish.          | 1836               | 118.3               | -16.8    | 901        | -44.4               | -28.1    | 47.0              |
| Mining                    | 2145               | -34.4               | -51.8    | 741        | -37.3               | -65.2    | 47.6              |
| Construction              | 13781              | 163.8               | -14.2    | 13009      | -29.2               | -21.6    | 33.2              |
| Manufacturing             | 12785              | 49.1                | -48.9    | 10529      | -9.3                | -37.6    | 26.2              |
| Pub. Utilities            | 2356               | 73.1                | -32.8    | 1978       | -14.0               | -35.5    | 25.0              |
| Wholesale Trade           | 2904               | 29.7                | -44.3    | 2355       | -15.7               | -45.2    | 27.6              |
| Retail Trade              | 5548               | 33.6                | -35.7    | 4558       | -13.0               | -36.3    | 25.3              |
| Transp., Info., Real Est. | 1007               | 10.2                | -31.7    | 929        | -5.1                | -25.3    | 26.3              |
| Services                  | 6076               | 12.3                | -27.3    | 5905       | -8.2                | -18.9    | 23.0              |
| Govt. Admin.              | 1812               | 25.5                | -15.8    | 767        | -27.1               | -15.9    | 25.8              |
| Not Available             | 807                | -32.7               | -25.6    | 653        | -1.1                | -31.4    | 4.8               |
| <b>By Occupation</b>      | 56140              | 53.8                | -31.6    | 42325      | -19.0               | -31.5    | 28.4              |
| Prof., Tech., Mgr.        | 4752               | 0.5                 | -36.1    | 4351       | -3.8                | -29.3    | 24.7              |
| Crafts                    | 4074               | 1.2                 | -38.9    | 3679       | -3.8                | -33.0    | 25.0              |
| Sales                     | 1547               | 16.3                | -39.8    | 1370       | -6.5                | -37.3    | 25.7              |
| Service                   | 3404               | 15.5                | -31.7    | 2867       | -10.7               | -24.5    | 23.2              |
| Farm., For., Fish.        | 1507               | 102.9               | -11.7    | 794        | -43.6               | -20.0    | 41.9              |
| Production                | 1044               | 110.0               | -16.5    | 2351       | -16.5               | -12.4    | 35.1              |
| Mach. Op., Maint.         | 2558               | 31.1                | -53.0    | 2045       | -14.5               | -44.8    | 22.3              |
| Handwork                  | 1012               | 23.9                | -47.4    | 3030       | -5.0                | -38.7    | 24.6              |
| Statistical Work          | 3004               | 136.1               | -20.4    | 14018      | -27.7               | -25.0    | 31.3              |
| Unk.                      | 1743               | 45.3                | -25.6    | 1441       | -22.5               | -38.2    | 28.6              |
| Not Available             | 467                | 73.0                | 80.2     | 379        | -11.0               | -46.5    | 23.5              |
| <b>By Duration</b>        | 56140              | 53.8                | -31.6    | 42325      | -19.0               | -31.5    | -                 |
| 1-14 weeks                | 47941              | 53.0                | -27.0    | 30305      | -23.4               | -25.2    | -                 |
| 15+ weeks (Long-term)     | 8199               | 64.8                | -40.2    | 12020      | -5.7                | -47.8    | -                 |

# Labor Market Conditions

## Minnesota Nonagricultural Wage & Salary Employment, Hours, and Earnings

| INDUSTRY                          | EMPLOYMENT <sup>1/</sup><br>(thousands) |              |              | PER CENT<br>CHANGE<br>FROM |              | PRODUCTION WORKERS' HOURS & EARNINGS |              |                               |              |                            |              |
|-----------------------------------|-----------------------------------------|--------------|--------------|----------------------------|--------------|--------------------------------------|--------------|-------------------------------|--------------|----------------------------|--------------|
|                                   |                                         |              |              |                            |              | Average<br>Weekly<br>Earnings        |              | Average<br>Hourly<br>Earnings |              | Average<br>Weekly<br>Hours |              |
|                                   | Apr.<br>1984                            | Mar.<br>1984 | Apr.<br>1983 | Mar.<br>1984               | Apr.<br>1983 | Apr.<br>1984                         | Mar.<br>1984 | Apr.<br>1984                  | Mar.<br>1984 | Apr.<br>1984               | Mar.<br>1984 |
| TOTAL NONAGRICULTURAL             | 1779.2                                  | 1742.1       | 1688.8       | 2.1                        | 5.4          |                                      |              |                               |              |                            |              |
| MANUFACTURING                     | 357.6                                   | 353.1        | 337.5        | 1.3                        | 6.0          | 395.09                               | 391.79       | 9.66                          | 9.65         | 40.9                       | 40.6         |
| Durable Goods                     | 216.5                                   | 212.5        | 200.5        | 1.9                        | 8.0          | 409.92                               | 406.02       | 9.76                          | 9.76         | 42.0                       | 41.6         |
| Furniture, Lumber and Wood        | 15.5                                    | 15.0         | 14.1         | 3.3                        | 9.8          | 431.70                               | 395.60       | 10.11                         | 9.89         | 42.7                       | 40.0         |
| Stone, Clay and Glass             | 8.8                                     | 8.1          | 7.9          | 8.9                        | 11.7         | 373.98                               | 370.66       | 9.92                          | 9.78         | 37.7                       | 37.9         |
| Primary Metals                    | 6.1                                     | 5.8          | 5.3          | 4.0                        | 13.6         | 395.60                               | 367.36       | 9.20                          | 8.96         | 43.0                       | 41.0         |
| Fabricated Metals                 | 32.8                                    | 33.2         | 32.1         | -1.5                       | 2.1          | 454.68                               | 455.70       | 10.80                         | 10.85        | 42.1                       | 42.0         |
| Nonelectrical Machinery           | 86.1                                    | 85.0         | 78.3         | 1.3                        | 10.0         | 428.13                               | 423.00       | 10.05                         | 10.00        | 42.6                       | 42.3         |
| Electrical Machinery              | 27.8                                    | 26.9         | 25.3         | 3.1                        | 10.2         | 332.11                               | 335.38       | 8.14                          | 8.16         | 40.8                       | 41.1         |
| Transportation Equipment          | 7.1                                     | 6.8          | 5.9          | 4.7                        | 20.7         | 482.24                               | 520.51       | 11.01                         | 11.34        | 43.8                       | 45.9         |
| Other Durable Goods <sup>2/</sup> | 32.4                                    | 31.6         | 31.7         | 2.4                        | 2.4          | 381.43                               | 379.81       | 9.06                          | 9.13         | 42.1                       | 41.6         |
| Nondurable Goods                  | 141.1                                   | 140.5        | 137.0        | 0.4                        | 3.0          | 375.09                               | 372.01       | 9.52                          | 9.49         | 39.4                       | 39.2         |
| Food and Kindred                  | 42.5                                    | 42.7         | 43.4         | -0.5                       | -2.2         | 344.67                               | 333.06       | 8.66                          | 8.54         | 39.8                       | 39.0         |
| Textile and Apparel               | 5.0                                     | 5.0          | 4.8          | 0.2                        | 4.3          | 241.61                               | 239.15       | 6.73                          | 6.57         | 35.9                       | 36.4         |
| Paper and Allied                  | 33.0                                    | 32.8         | 32.0         | 0.5                        | 2.9          | 477.17                               | 477.63       | 11.02                         | 10.98        | 43.3                       | 43.5         |
| Printing and Publishing           | 18.6                                    | 18.1         | 15.8         | 1.3                        | 7.9          | 355.95                               | 359.00       | 9.86                          | 10.00        | 36.1                       | 35.9         |
| Chemical and Petroleum            | 9.4                                     | 9.3          | 9.3          | 1.1                        | 1.1          | 432.28                               | 429.95       | 10.70                         | 10.59        | 40.4                       | 40.6         |
| Rubber and Leather                | 12.6                                    | 12.6         | 11.6         | -0.2                       | 8.6          | 314.31                               | 315.56       | 8.08                          | 8.05         | 38.9                       | 39.2         |
| NONMANUFACTURING                  | 1421.6                                  | 1389.0       | 1351.3       | 2.3                        | 5.2          |                                      |              |                               |              |                            |              |
| Mining and Quarrying              | 10.1                                    | 9.8          | 9.2          | 3.3                        | 9.5          | 452.40                               | 456.40       | 13.00                         | 13.04        | 34.8                       | 35.0         |
| Metal Mining                      | 8.4                                     | 8.3          | 7.7          | 0.4                        | 8.9          | 464.20                               | 469.88       | 13.94                         | 13.82        | 33.3                       | 34.0         |
| Construction                      | 59.4                                    | 57.0         | 49.9         | 14.3                       | 19.0         | 544.09                               | 565.91       | 15.03                         | 15.42        | 36.2                       | 36.7         |
| Building                          | 17.4                                    | 15.7         | 14.6         | 10.7                       | 19.1         | 509.79                               | 545.74       | 14.24                         | 14.71        | 35.8                       | 37.1         |
| Highway and Heavy                 | 2.9                                     | 5.5          | 6.6          | 42.4                       | 18.9         | 457.30                               | 485.01       | 12.26                         | 12.73        | 37.3                       | 38.1         |
| Special Trades                    | 14.2                                    | 30.7         | 28.7         | 11.2                       | 19.0         | 583.18                               | 592.78       | 16.11                         | 16.33        | 36.2                       | 36.3         |
| Transportation                    | 61.1                                    | 59.3         | 57.3         | 3.1                        | 4.8          |                                      |              |                               |              |                            |              |
| Railroads                         | 9.8                                     | 9.9          | 10.9         | -1.0                       | -9.4         | 538.66                               | 538.66       | 11.71                         | 11.71        | 46.0                       | 46.0         |
| Trucking and Warehousing          | 24.1                                    | 23.6         | 27.8         | 2.1                        | 5.8          | 425.35                               | 433.79       | 11.75                         | 11.82        | 36.2                       | 36.7         |
| Public Utilities                  | 34.5                                    | 34.3         | 33.7         | 0.5                        | 2.4          | 512.42                               | 507.87       | 12.94                         | 12.89        | 39.6                       | 39.4         |
| Communications                    | 20.2                                    | 20.3         | 19.8         | 0.5                        | 2.0          | 468.44                               | 466.07       | 11.95                         | 11.92        | 39.2                       | 39.1         |
| Elec., Gas and Sanitary           | 14.3                                    | 14.7         | 13.9         | 0.4                        | 2.9          | 564.40                               | 557.39       | 14.11                         | 14.04        | 40.0                       | 39.7         |
| Trade                             | 442.5                                   | 429.9        | 420.8        | 2.9                        | 5.1          | 223.34                               | 224.24       | 7.52                          | 7.55         | 29.7                       | 29.7         |
| Retail                            | 330.3                                   | 319.4        | 313.1        | 3.4                        | 5.5          | 177.45                               | 177.18       | 6.50                          | 6.49         | 27.3                       | 27.3         |
| General Merchandise               | 46.0                                    | 45.1         | 43.7         | 2.0                        | 5.2          | 166.10                               | 164.18       | 6.04                          | 5.97         | 27.5                       | 27.5         |
| Food Stores                       | 44.7                                    | 44.0         | 44.5         | 1.7                        | 0.5          | 218.22                               | 219.06       | 7.63                          | 7.58         | 28.6                       | 28.9         |
| Automotive                        | 35.0                                    | 34.0         | 33.3         | 2.9                        | 5.2          | 302.29                               | 294.46       | 8.17                          | 7.98         | 37.0                       | 36.9         |
| Eating and Drinking               | 111.5                                   | 105.5        | 104.4        | 5.6                        | 6.8          | 95.68                                | 97.19        | 4.60                          | 4.65         | 20.8                       | 20.9         |
| Wholesale                         | 112.1                                   | 110.4        | 107.8        | 1.6                        | 4.1          | 389.62                               | 389.76       | 10.12                         | 10.23        | 38.5                       | 38.1         |
| F.I.R.E.                          | 104.2                                   | 103.0        | 100.1        | 1.2                        | 4.1          |                                      |              |                               |              |                            |              |
| Finance                           | 49.0                                    | 48.9         | 47.3         | 0.2                        | 3.6          |                                      |              |                               |              |                            |              |
| Insurance                         | 37.1                                    | 37.0         | 35.7         | 0.3                        | 4.1          |                                      |              |                               |              |                            |              |
| Real Estate                       | 18.0                                    | 17.0         | 17.1         | 6.1                        | 5.6          |                                      |              |                               |              |                            |              |
| Service Industries                | 409.4                                   | 401.6        | 387.4        | 2.0                        | 5.7          |                                      |              |                               |              |                            |              |
| Hotel and Lodging                 | 21.7                                    | 20.9         | 19.5         | 3.8                        | 11.5         |                                      |              |                               |              |                            |              |
| Business Services                 | 66.6                                    | 64.8         | 59.4         | 2.8                        | 12.1         |                                      |              |                               |              |                            |              |
| Health Services                   | 135.4                                   | 135.1        | 132.4        | 0.2                        | 2.3          |                                      |              |                               |              |                            |              |
| Private Education                 | 25.0                                    | 24.7         | 24.4         | 1.4                        | 2.7          |                                      |              |                               |              |                            |              |
| Soc. Serv., Museums etc.          | 88.2                                    | 87.2         | 83.2         | 1.2                        | 6.0          |                                      |              |                               |              |                            |              |
| Government                        | 300.4                                   | 299.3        | 291.8        | 0.4                        | 2.9          |                                      |              |                               |              |                            |              |
| Federal                           | 31.0                                    | 30.7         | 30.4         | 0.9                        | 2.0          |                                      |              |                               |              |                            |              |
| State                             | 75.7                                    | 75.2         | 73.7         | 0.7                        | 2.8          |                                      |              |                               |              |                            |              |
| Local                             | 193.7                                   | 193.4        | 187.8        | 0.2                        | 3.2          |                                      |              |                               |              |                            |              |

<sup>1/</sup> Totals may not add because of rounding.

<sup>2/</sup> Includes Scientific Instruments and Miscellaneous Industries.



# Labor Market Conditions

## Labor Force Data: State, SMSAs, and Counties

| Area or County                          | April, 1984 Prelim.          |        |             | Area or County          | April, 1984 Prelim.          |        |             |
|-----------------------------------------|------------------------------|--------|-------------|-------------------------|------------------------------|--------|-------------|
|                                         | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |                         | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |
| State of Minnesota                      | 2291113                      | 145104 | 6.5         | Lake                    | 4229                         | 770    | 18.2        |
| Metropolitan Areas                      |                              |        |             | Lake of the Woods       | 1904                         | 208    | 10.9        |
| Duluth/Superior                         |                              |        |             | Le Sueur                | 11706                        | 1289   | 11.0        |
| (Duluth City Only)                      | 35720                        | 3626   | 10.2        | Lincoln                 | 4109                         | 309    | 7.5         |
| Fargo/Moorhead                          |                              |        |             | Lyon                    | 16655                        | 925    | 5.9         |
| (Clay County, MN Only)                  | 28524                        | 2017   | 7.1         | McLeod                  | 16735                        | 1139   | 6.8         |
| Minneapolis/St. Paul SMSA <sup>2/</sup> | 1214494                      | 57397  | 4.7         | Mahnomen                | 3109                         | 402    | 12.9        |
| Rochester SMSA (Olsted Co.)             | 59520                        | 2694   | 4.5         | Marshall                | 6778                         | 1057   | 15.6        |
| St. Cloud SMSA <sup>3/</sup>            | 80945                        | 6255   | 7.7         | Martin                  | 13952                        | 873    | 6.3         |
| Counties                                |                              |        |             | Meeker                  | 10939                        | 1322   | 12.1        |
| Aitkin                                  | 5525                         | 1121   | 20.1        | Mille Lacs              | 8841                         | 822    | 9.3         |
| Anoka                                   | 115424                       | 5885   | 5.1         | Morrison                | 13432                        | 1490   | 11.2        |
| Becker                                  | 13104                        | 2155   | 16.4        | Mower                   | 18421                        | 1271   | 6.9         |
| Beltmont                                | 16735                        | 1594   | 9.5         | Murray                  | 6443                         | 583    | 9.0         |
| Benton                                  | 12510                        | 987    | 7.9         | Nicollet                | 15004                        | 793    | 5.3         |
| Big Stone                               | 4147                         | 303    | 7.3         | Nobles                  | 12511                        | 858    | 6.9         |
| Blue Earth                              | 29105                        | 1497   | 5.1         | Norman                  | 4865                         | 433    | 8.9         |
| Brown                                   | 15289                        | 970    | 6.3         | Olsted                  | 59520                        | 2694   | 4.5         |
| Carlton                                 | 12063                        | 1535   | 12.7        | Otter Tail              | 25809                        | 2735   | 10.6        |
| Carver                                  | 21680                        | 1176   | 5.4         | Pennington              | 6467                         | 665    | 10.3        |
| Cass                                    | 10432                        | 1228   | 11.8        | Pine                    | 10133                        | 1255   | 12.4        |
| Chippewa                                | 7849                         | 601    | 7.7         | Pipestone               | 5876                         | 324    | 5.5         |
| Chicago                                 | 15572                        | 1199   | 7.7         | Polk                    | 17800                        | 1762   | 9.9         |
| Clay                                    | 28524                        | 2017   | 7.1         | Pope                    | 5713                         | 480    | 8.4         |
| Clearwater                              | 4405                         | 973    | 22.1        | Ramsey                  | 269556                       | 12592  | 4.7         |
| Cook                                    | 2298                         | 352    | 15.3        | Red Lake                | 2318                         | 399    | 17.2        |
| Cottonwood                              | 7636                         | 454    | 5.9         | Redwood                 | 10880                        | 620    | 5.7         |
| Crow Wing                               | 17395                        | 1844   | 10.6        | Renville                | 12009                        | 1202   | 10.0        |
| Dakota                                  | 113728                       | 5243   | 4.6         | Rice                    | 24623                        | 1930   | 7.8         |
| Dodge                                   | 8394                         | 787    | 9.4         | Rock                    | 6040                         | 254    | 4.2         |
| Douglas                                 | 13826                        | 1077   | 7.8         | Roseau                  | 5916                         | 708    | 12.0        |
| Faribault                               | 10823                        | 797    | 7.4         | St. Louis (Inc. Duluth) | 87343                        | 10496  | 12.0        |
| Fillmore                                | 12697                        | 989    | 7.8         | Scott                   | 25997                        | 1527   | 5.9         |
| Freeborn                                | 17302                        | 1599   | 9.2         | Sherburne               | 14790                        | 1107   | 7.5         |
| Goodhue                                 | 20571                        | 1329   | 6.5         | Sibley                  | 8737                         | 723    | 8.3         |
| Grant                                   | 3675                         | 265    | 7.3         | Stearns                 | 53645                        | 4161   | 7.8         |
| Hennepin                                | 450273                       | 24137  | 4.4         | Steele                  | 16704                        | 1194   | 7.1         |
| Houston                                 | 10298                        | 651    | 6.3         | Stevens                 | 6040                         | 358    | 5.9         |
| Hubbard                                 | 5760                         | 805    | 14.0        | Swift                   | 6556                         | 570    | 8.7         |
| Isanti                                  | 10575                        | 781    | 7.4         | Todd                    | 11882                        | 1014   | 8.5         |
| Itasca                                  | 17301                        | 2272   | 13.1        | Traverse                | 3001                         | 211    | 7.0         |
| Jackson                                 | 8222                         | 437    | 5.3         | Wabasha                 | 9964                         | 794    | 8.0         |
| Kanabec                                 | 4531                         | 625    | 11.3        | Wadena                  | 5657                         | 553    | 9.8         |
| Kandiyohi                               | 19043                        | 1399   | 7.3         | Waseca                  | 9103                         | 608    | 6.7         |
| Kittson                                 | 3544                         | 399    | 11.3        | Washington              | 68593                        | 3120   | 4.7         |
| Koochiching                             | 7431                         | 876    | 11.8        | Watsonwan               | 6949                         | 500    | 7.2         |
| Lac qui Parle                           | 5977                         | 351    | 5.9         | Wilkin                  | 4471                         | 308    | 6.9         |
|                                         |                              |        |             | Winona                  | 22770                        | 1935   | 8.5         |
|                                         |                              |        |             | Wright                  | 35471                        | 2518   | 7.1         |
|                                         |                              |        |             | Yellow Medicine         | 7920                         | 525    | 6.6         |

### Technical Notes:

1/ Labor force data is computed according to BLS methodology. The method includes an adjustment to assure that the sum of the substate areas equals the separately estimated State total. This adjustment is Applied to all county and SMSA areas. County and area unemployment was multiplied by an adjustment factor of 1.04; employment was multiplied by 1.03. For a more detailed explanation see the Review of Labor and Economic Conditions, Vol. 4, No. 4, (February 1978 Issue), p. 29.

2/ Anoka, Carver, Chicago, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright Counties.

3/ Benton, Sherburne, and Stearns Counties.

# Income & Purchasing Power

This section describes how Minnesotans fare with respect to their ability to acquire goods and services needed to meet their needs and wants and how they compare with others in the United States in this respect. Real Per Capita Personal Income measures money income received by all individuals from wages and salaries, dividends, rent, professional and farm income, personal interest payments, and transfer payments, less personal contributions for social security, all adjusted for the price level as indicated by the CPI

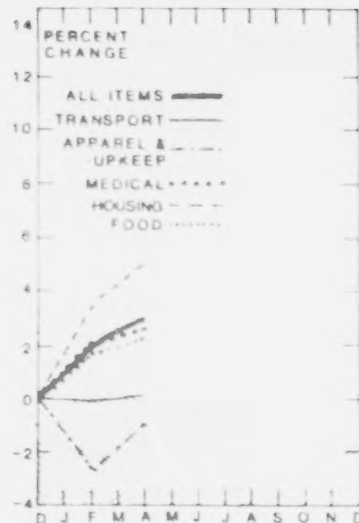
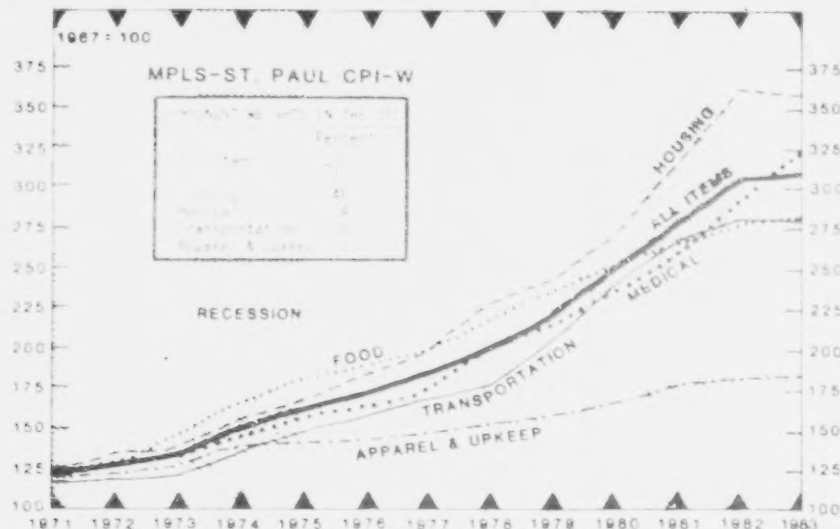
and for population. The Consumer Price Index (CPI) measures changes in the price of a representative combination of goods and services consumed by urban wage and salary workers relative to 1967. The inverse of the CPI (1/CPI) indicates the value of the dollar; when the CPI increases the value of the dollar falls. The change in the CPI over any period of time divided by the value at the beginning of the period gives the percentage change, or the rate of inflation.

| Income And Purchasing Power                   | MINNESOTA      |                        |          | UNITED STATES  |                        |          |
|-----------------------------------------------|----------------|------------------------|----------|----------------|------------------------|----------|
|                                               | I Qtr.<br>1984 | Percent Change<br>from |          | I Qtr.<br>1984 | Percent Change<br>from |          |
|                                               |                | Last Qtr.              | Year Ago |                | Last Qtr.              | Year Ago |
| <u>INCOME STATISTICS</u>                      |                |                        |          |                |                        |          |
| Personal Income 1/*                           |                |                        |          |                |                        |          |
| Total Personal Income (in Billions)           | 52.2           | 3.6                    | 8.5      | 2924.6         | 3.2                    | 10.0     |
| Due to Labor 2/                               | n.a.           | n.a.                   | n.a.     | 1945.2         | 50.6                   | 63.8     |
| Due to Property 3/                            | n.a.           | n.a.                   | n.a.     | 696.8          | 52.7                   | 36.0     |
| Due to Transfer Payments 4/                   | n.a.           | n.a.                   | n.a.     | 411.3          | 3.6                    | 4.8      |
| Total Disposable Personal Income              | n.a.           | n.a.                   | n.a.     | 2503.3         | 3.3                    | 11.0     |
| As Percent of Total Pers. Inc.                | n.a.           | n.a.                   | n.a.     | 85.6           | 0.1                    | 0.8      |
| Per Capita Personal Income 5/                 |                |                        |          |                |                        |          |
| Current dollar Value                          | 12473          | 3.4                    | 7.8      | 12416          | 2.9                    | 9.0      |
| Real (1967) Dollar Value                      | 3922           | 1.6                    | 4.8      | 4096           | 2.3                    | 5.2      |
| Real Median Family Money Income 5/*           |                |                        |          |                |                        |          |
| All Families                                  | 9031           | 1.2                    | 4.0      | 9090           | 2.1                    | 4.5      |
| Four Person Families                          | 9337           | 0.9                    | 3.4      | 10605          | 2.1                    | 4.6      |
| Earnings of Production Workers in Mfg. 6/     |                |                        |          |                |                        |          |
| Average weekly Earnings                       | 392.60         | 0.1                    | 5.3      | 369.49         | 0.5                    | 7.9      |
| Real Average Weekly Earnings 7/               | 123.46         | -1.5                   | 2.4      | 121.90         | -0.1                   | 4.2      |
| Income Related Criteria 8/                    |                |                        |          |                |                        |          |
| Standard Budgets                              |                |                        |          |                |                        |          |
| Low                                           |                |                        |          |                |                        |          |
| Moderate                                      |                |                        |          |                |                        |          |
| High                                          |                |                        |          |                |                        |          |
| Poverty Level Income                          |                |                        |          |                |                        |          |
| Family of four                                | 10700          | ---                    | 0.0      | 10200          | ---                    | 1.0      |
| <u>MEASURES OF PRICE CHANGE AND INFLATION</u> |                |                        |          |                |                        |          |
| Consumer Price Level (CPI) 9/                 |                |                        |          |                |                        |          |
| Food                                          | 316.0          | 1.7                    | 2.9      | 301.1          | 0.6                    | 3.6      |
| Housing                                       | 306.0          | 2.4                    | 4.9      | 301.2          | 2.7                    | 4.0      |
| Transportation                                | 361.6          | 2.6                    | 0.1      | 323.9          | -0.2                   | 1.9      |
| Medical                                       | 290.4          | 0.2                    | 5.2      | 308.2          | 0.1                    | 5.6      |
| Medical                                       | 347.9          | 2.1                    | 12.7     | 370.5          | 2.2                    | 6.4      |
| Purchasing Power of the Dollar (1/CPI)        | .31            | -1.7                   | -2.8     | .33            | -0.6                   | -3.5     |
| Producer Price Index                          |                |                        |          |                |                        |          |
| Industrial Commodities                        | n.a.           | n.a.                   | n.a.     | 309.3          | 1.1                    | 2.9      |
|                                               | n.a.           | n.a.                   | n.a.     | 320.5          | 0.7                    | 2.1      |

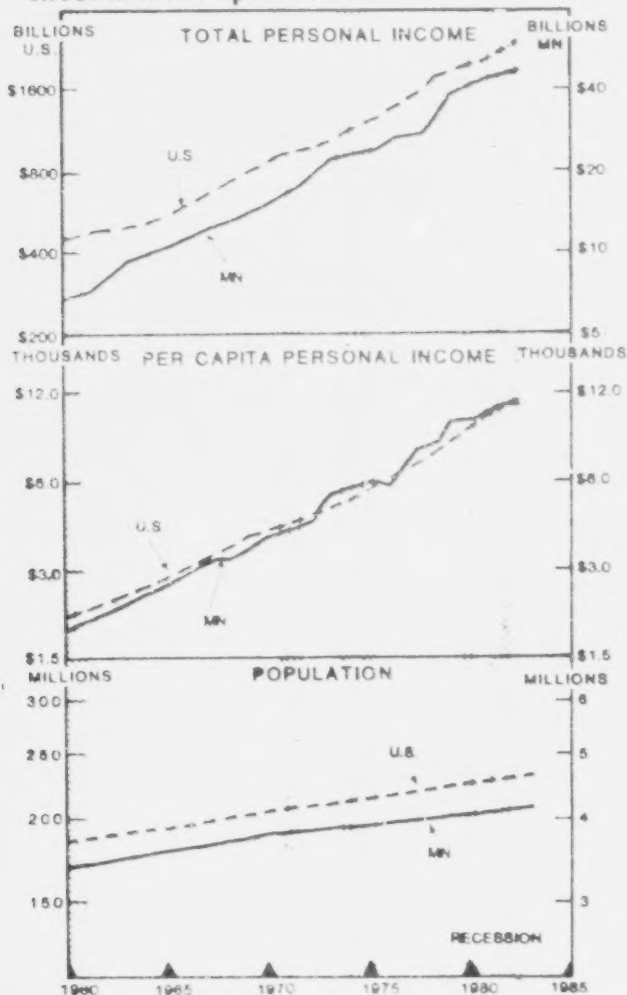
# Income & Purchasing Power

## Consumer Price Index- Major Components

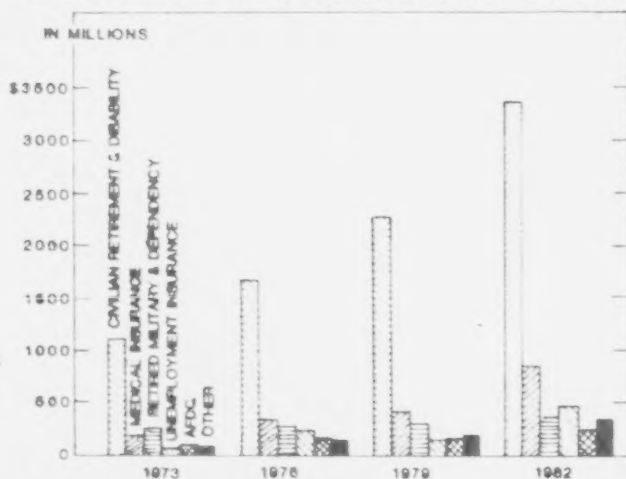
%  $\Delta$  From Dec. 1983



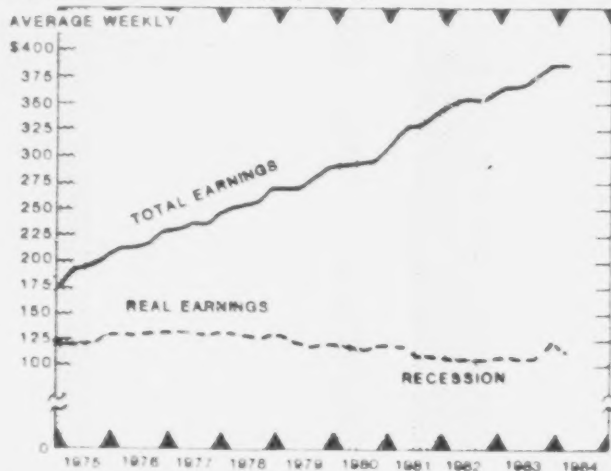
## U.S. & MN Personal Income And Population



## Government Transfer Payments To Individuals In Minnesota (Selected Years)



## Minnesota Earnings, Mfg.



# Output, Expenditures, Money, & Credit Conditions

The overall level and composition of National Output shape labor market conditions, and nominal and real earnings. (Nominal values are not adjusted for inflation; real values are adjusted for inflation.) Personal Consumption Expenditures, especially on Durable Goods, together with data on Retail Sales, are frequently used as indicators of future levels of employment. The number of Building Permits influences the level of employment in construction and related industries. The Federal Budget Deficit is a key indicator of the stimulatory effect of government policy. Whether this effect results in inflation, improved employment conditions, or some combination

of the two, depends in part, upon the degree to which present productive capacity is utilized. Present and anticipated Money and Credit Conditions determine the ability of consumers, business, and State and Local governments to borrow in order to finance purchases, which, in turn, generate income and employment. Unfortunately, most data of this kind is available only for the Nation. However, in an economy as interdependent as ours, analysis of the directions of change of key national indicators is a useful tool for understanding the course of the State economy.

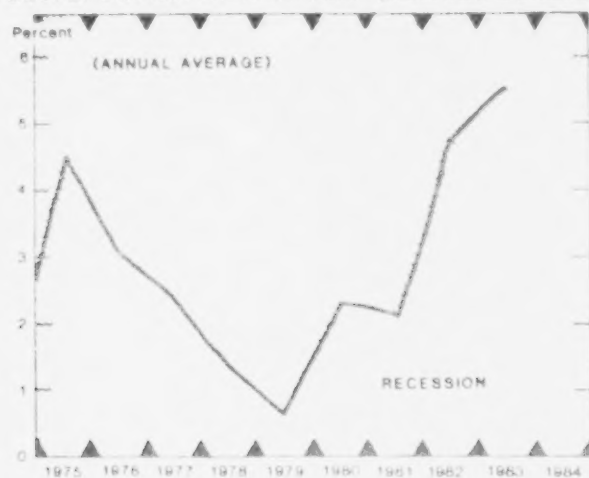
| Output, Expenditure, Money,<br>And Credit Conditions                                   | MINNESOTA      |                        |          | UNITED STATES  |                        |          |
|----------------------------------------------------------------------------------------|----------------|------------------------|----------|----------------|------------------------|----------|
|                                                                                        | 1 Qtr.<br>1984 | Percent Change<br>from |          | 1 Qtr.<br>1984 | Percent Change<br>from |          |
|                                                                                        |                | Last Qtr.              | Year Ago |                | Last Qtr.              | Year Ago |
| OUTPUT AND EXPENDITURE                                                                 |                |                        |          |                |                        |          |
| Retail Sales (in billions of dollars)                                                  | 2082           | 10.0                   | 17.1     | 105249         | 3.4                    | 13.4     |
| Private Building Units Authorized by<br>Building Permits <sup>1</sup>                  | 35852          | 71.7                   | 33.1     | 1825           | 13.6                   | 24.7     |
| Index of Industrial Production <sup>2</sup>                                            | n.a.           | n.a.                   | n.a.     | 159.7          | 2.7                    | 15.3     |
| Gross National Product (in billions of<br>1972 dollars) <sup>3</sup>                   | n.a.           | n.a.                   | n.a.     | 1604.3         | 2.0                    | 7.7      |
| Personal Consumption Expenditures:                                                     | n.a.           | n.a.                   | n.a.     | 1046.8         | 1.4                    | 6.1      |
| Durable Goods                                                                          | n.a.           | n.a.                   | n.a.     | 171.9          | 4.1                    | 17.9     |
| As Percent of Pers. Cons.                                                              | n.a.           | n.a.                   | n.a.     | 16.4           | 2.5                    | 10.8     |
| Non-durable Goods                                                                      | n.a.           | n.a.                   | n.a.     | 388.0          | 1.4                    | 5.7      |
| Services                                                                               | n.a.           | n.a.                   | n.a.     | 486.9          | 0.5                    | 3.2      |
| Gross Private Domestic Investment:                                                     | n.a.           | n.a.                   | n.a.     | 272.2          | 11.0                   | 43.3     |
| As Percent of GNP                                                                      | n.a.           | n.a.                   | n.a.     | 17.0           | 9.0                    | 32.8     |
| Nonresidential, Fixed                                                                  | n.a.           | n.a.                   | n.a.     | 185.9          | 2.9                    | 16.3     |
| Residential                                                                            | n.a.           | n.a.                   | n.a.     | 59.7           | 7.0                    | 31.2     |
| Net Exports                                                                            | n.a.           | n.a.                   | n.a.     | -6.5           | #                      | #        |
| Government Purchases:                                                                  | n.a.           | n.a.                   | n.a.     | 291.7          | -0.2                   | -0.4     |
| Federal                                                                                | n.a.           | n.a.                   | n.a.     | 114.4          | -1.7                   | -3.4     |
| State and Local                                                                        | n.a.           | n.a.                   | n.a.     | 177.3          | 0.8                    | 1.6      |
| GNP Gap (GDP Impl. Minus Present GNP/<br>1972 Dollars (in billions))                   | n.a.           | n.a.                   | n.a.     | n.a.           | n.a.                   | n.a.     |
| Current Dollars (in billions)                                                          | n.a.           | n.a.                   | n.a.     | n.a.           | n.a.                   | n.a.     |
| Current Federal Budget Deficit <sup>4</sup><br>As Percent of GNP                       | n.a.           | n.a.                   | n.a.     | -4.8           | -5.5                   | -5.8     |
| Inventory to Sales: Durable Goods in Mfg.                                              | n.a.           | n.a.                   | n.a.     | 1.80           | n.a.                   | n.a.     |
| New Orders to Shipments: Durable Goods                                                 | n.a.           | n.a.                   | n.a.     | 1.06           | 1.2                    | 6.3      |
| Plant Capacity Utilization Rate in Mfg. <sup>5</sup>                                   | n.a.           | n.a.                   | n.a.     | 80.7           | 2.3                    | 14.1     |
| MONEY AND CREDIT CONDITIONS                                                            |                |                        |          |                |                        |          |
| Interest Rates:                                                                        |                |                        |          |                |                        |          |
| Discount Rate                                                                          | 8.50           | 0.0                    | 0.0      | 8.50           | 0.0                    | 0.0      |
| Prime Rate                                                                             | n.a.           | n.a.                   | n.a.     | 11.07          | 0.6                    | 1.7      |
| Rate on Conventional Mortgages                                                         | 11.97          | 1.8                    | -10.5    | 12.21          | -2.5                   | -8.5     |
| Federal Funds Rate                                                                     | n.a.           | n.a.                   | n.a.     | 9.69           | 2.8                    | 12.0     |
| Consumer Installment Credit Outstanding<br>As Percent of Disposable<br>Personal Income | n.a.           | n.a.                   | n.a.     | 398855         | 3.2                    | 13.4     |
|                                                                                        | n.a.           | n.a.                   | n.a.     | 15.9           | -0.1                   | 2.2      |

\* Percentage change not applicable.

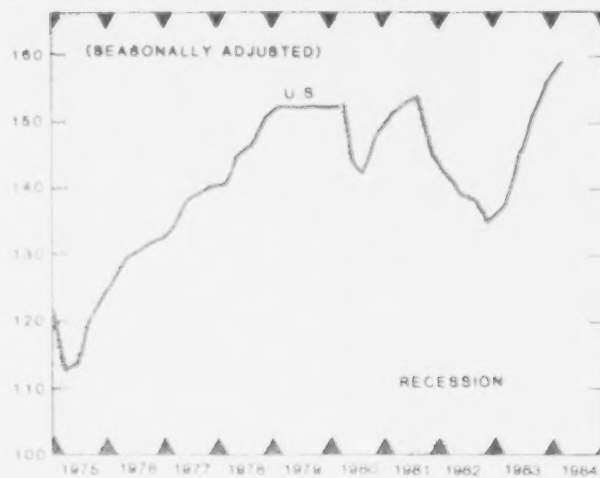


# Output, Expenditures, Money, & Credit Conditions

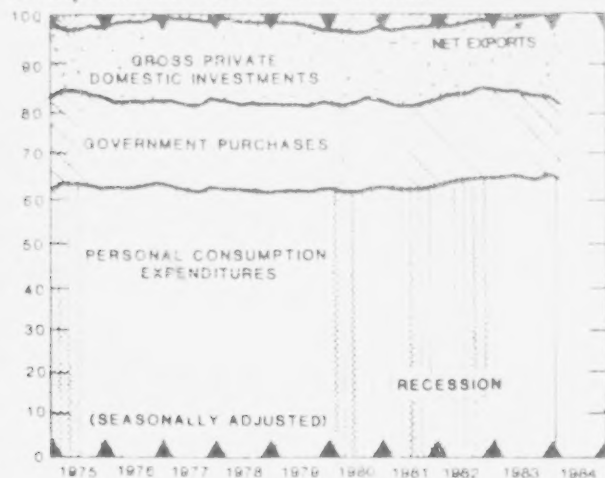
## Federal Deficit as % of GNP (Current Dollars)



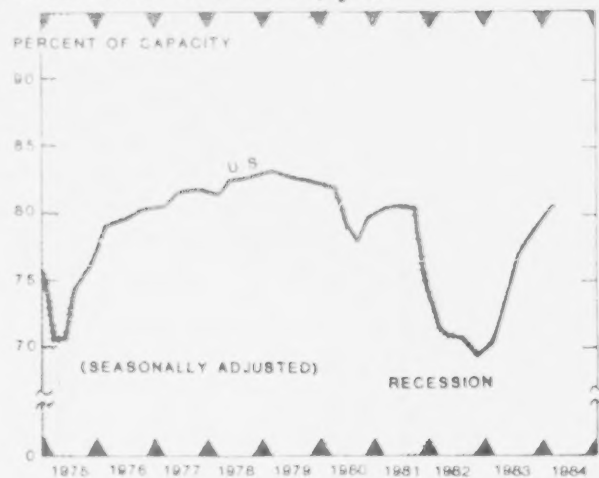
## Index of Industrial Production



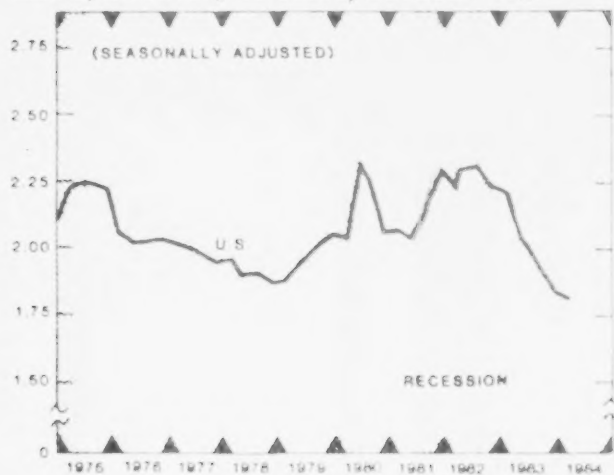
## Composition of GNP in Percent



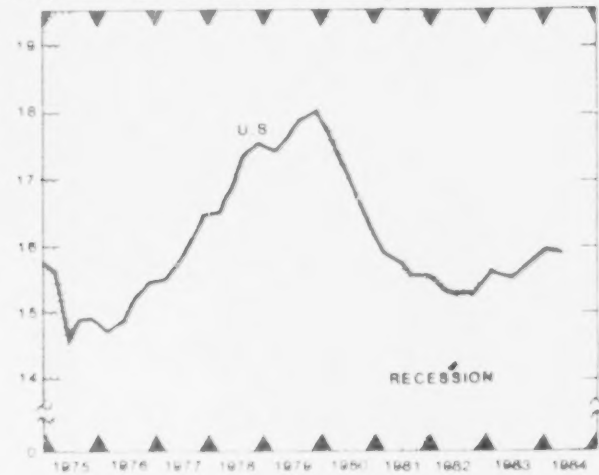
## Plant Utilization Rates, Mfg.



## Ratio, Inventory to Sales, Durable Mfg.



## Ratio, Consumer Installment Debt to Disposable Personal Income, U.S.



# Technical Notes

For the reader's convenience the notes which follow are organized in sequence for the pages which appear in the statistical section. Each note corresponds to the footnote or reference notation for the given page.

\* Wherever an asterik appears the data is seasonally adjusted.

## Page S-2

- 1/ Four percent is a generally agreed upon criteria for measuring full employment. It allows for the movement of persons between jobs. Labor Force Unemployment Rate less four percent, based on official estimates.
- 2/ Estimated worker hours expended in nonfarm payroll employment as a percent of potential worker hours assuming that each member of the nonfarm labor payroll labor force was employed at a standard rate of 40 hours per week.

## Page S-3

- 1/ The handbook unemployment rate is the estimate of unemployment prior to the Current Population Survey (CPS) adjustment.

## Page S-7

- 1/ In billions of dollars at an annual rate.
- 2/ The contribution to total Personal Income of wages, salaries, and other labor income. Percent change entry in Labor Income Impact is the percent that the change in labor income comprises of the change in total Personal Income. This is not available for Minnesota on a quarterly basis.
- 3/ The figure for the quarter is the contribution to total Personal Income of proprietor's rental, dividend, and interest income. The percent change entry in Property Income Impact is analogous to the Labor Income Impact described in 2/ above.
- 4/ The contribution to total Personal Income of transfer payments (unemployment compensation, AFDC, etc.) The percent change entry is analogous to the Labor Income Impact in 2/ above.
- 5/ In dollars at an annual rate.
- 6/ In dollars per week.
- 7/ Real average weekly earnings are the average weekly earnings of production workers in manufacturing divided by the CPI.
- 8/ Annual data.
- 9/ Value is CPI-W (Urban Wage earners and clerical workers).

## Page S-9

- 1/ U.S. data annualized in thousands. Source: Bureau of the Census.
- 2/ Base Year is 1967. Source: Federal Reserve Board.
- 3/ Totals may not add due to rounding.
- 4/ Values shown in percent change columns are deficit as percent of GNP for period cited.
- 5/ Source: Federal Reserve Board.

purchasing power has occurred. Future articles on this subject will need to examine in more detail how particular wage levels and employee benefits react to loss in purchasing power. Will there be a greater demand to retrieve lost ground, or will wage demand continue to moderate as price increases slow? Also will wholesale changes in the occupational structure occur due to wage erosion?

Wage variation by geographic area shows the continuation of wage parity obtained by the NE area with the Metro area. This occurred over the last decade, but it remains to be seen if, in the face of economic change or realignment, it can be maintained for an extended period of time. For the remaining geographic areas it appears that fluctuations occur within each area but no substantial gains have been made in regard to parity with the higher wage areas.

The Research and Statistical Services Office will continue to periodically examine wage trends and publish the results of these studies. The Research Office also publishes the results of its Annual Salary Survey, copies which can be obtained without cost by writing or calling the office at 390 North Robert Street, in St. Paul, telephone #(612) 296-6545.

## Available Publications

Review of Labor and Economic Conditions and its Monthly Supplement (Recent Issues)

Labor Market Information Summary for 1985 for Minneapolis-St. Paul SMSA (May 1984), St. Cloud SMSA (June 1984), and Minnesota (April 1984)

Employment, Hours, and Earnings, January 1970-February 1984, Minneapolis-St. Paul Area (April 1984)

Minnesota Nonagricultural Wage and Salary Employment, Hours, and Earnings, January 1976-December 1983 (March 1984)

Minnesota Employment and Wage Data by County (Third Quarter 1983) Limited number available for 1975-1981

1981 Occupational Employment Statistics in Minnesota (November 1982)

1980 Occupational Employment Statistics in Minnesota (May 1982)

Minnesota Labor Market Information Directory (June 1984) Available after July 1, 1984

Average Covered Employment & Wages by Economic Region for the Calendar Year 1982 by two Digits of Industry (also available for 1976-1981)

Cyclical Sensitivity in Minnesota (August 1981)

Unemployment Compensation Program Statistics: Total Wages, Taxable Wages, Contributions Due, and Benefits Paid, 1950-1978 (April 1980)

Write to: Director, Research and Statistical Services Office  
Minnesota Department of Economic Security  
390 North Robert Street  
St. Paul, Minnesota 55101

# CURRENT MINNESOTA LABOR MARKET CONDITIONS

April 1984 Supplement to The Review of Labor and Economic Conditions

Prepared by the Research and Statistical Services Office, MN Dept. of Economic Security, 390 N. Robert St., St. Paul MN 55101, in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics, and Employment and Training Admin.

## Nation

Although most of the economic reports for March showed either slower growth or declines in the various economic indicators, some economists believe that very bad weather in March and December may have distorted the picture. Nevertheless, it appears, at least for now, that economic growth will be slower in the coming months.

Nationally, all of the labor market data showed a lower level of employment in March. The seasonally adjusted employment rate declined to 1.2 percent in March after falling steadily during the six previous months. However, the rate also edged in August and February of 1981 while on its ascent from two consecutive drops of 1.0 percent in December 1980. Signs of slower growth were reflected in total employment seasonally adjusted, which climbed by a relatively modest 16,000 in March after annual averaging 415,000 in the past four months, while seasonally adjusted nonfarm payroll employment rose by only 143,000 after increases of 117,000 in February and 141,000 in January. In addition, manufacturing employment in March grew by only a modest 50,000 after gains of over 100,000 in each of the past two months. Meanwhile, severe weather and rising interest rates put a damper on construction employment which fell by 50,000 following increases averaging 15,000 in January and February. More complete data on employment for April and May should show if the economy is actually in a period of slower growth.

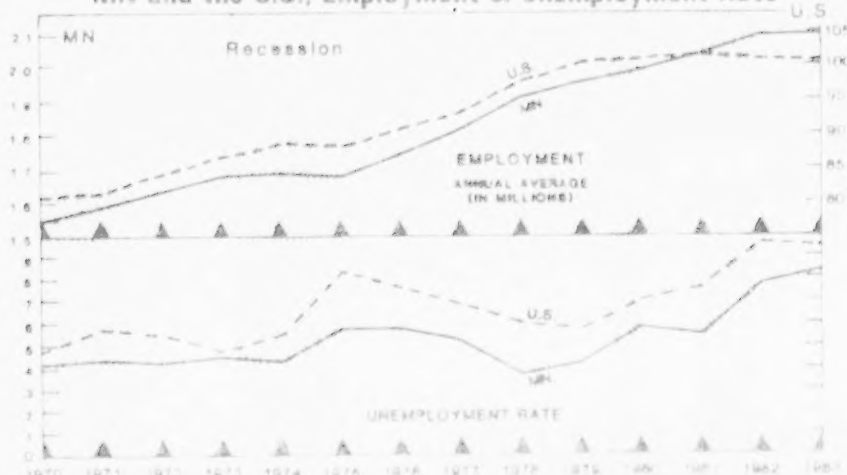
## State

Significant over-the-year improvement in the labor force data in March partially overshadowed rather modest advances in the monthly figures. The unemployment rate which fell only slightly more than its counterpart for March was substantially below the rate of March 1983, while total employment, with only a fractional increase, was far above the year earlier level. Seasonally adjusted nonfarm payroll employment also rose modestly in March.

Although the 3.1 of a percentage point drop in the latest seasonally unadjusted unemployment rate was only slightly more than the 14-year average decline in March, the rate, at 7.1 percent, is still somewhat below the year earlier rate and has been lower 11 of the past 13 months. Also, total employment seasonally unadjusted which rose 74,000 in March compared to the average March rise of 126,000, was 1.8 percent above March 1983. Meanwhile, seasonally adjusted nonfarm payroll employment rose by 5,900 in March after adjusted increases of 11,000 in February and 11,100 in January. The largest monthly employment gains were in Trade, 11,000, Mining 11,000, and 11,000 each in Manufacturing and in Transportation and Public Utilities sectors. Some recovery began in December 1983, payroll employment was raised by 90,400.

| Labor Force Estimates | MINNESOTA<br>(Numbers in '000's) |             |          | UNITED STATES<br>(Numbers in '000,000's) |             |          |
|-----------------------|----------------------------------|-------------|----------|------------------------------------------|-------------|----------|
|                       | March<br>1984                    | Change From |          | March<br>1984                            | Change From |          |
|                       |                                  | Last Mo.    | Year Ago |                                          | Last Mo.    | Year Ago |
| civilian Labor Force  | 467.6                            | 11.7        | 20.9     | 111.7                                    | 0.5         | 1.0      |
| Employed              | 408.9                            | 17.6        | 81.6     | 102.1                                    | 0.2         | 1.1      |
| Unemployed            | 158.5                            | -4.9        | -60.7    | 9.6                                      | -           | -        |
| Unemployment Rate     |                                  |             |          |                                          |             |          |
| Actual                | 7.1                              | -0.4        | -3.3     | 8.1                                      | -0.3        | -        |
| Seasonally Adjusted   | 7.4                              | n.d.        | n.d.     | 7.0                                      | -           | -        |

MN and the U.S., Employment & Unemployment Rate



MN, 1983 and 1984





# Minnesota Nonagricultural Wage & Salary Employment, Hours, and Earnings

| INDUSTRY                          | EMPLOYMENT <sup>1/</sup><br>(thousands) |              |              | PER CENT<br>CHANGE<br>FROM |              | PRODUCTION WORKERS' HOURS & EARNINGS |              |                               |              |                            |              |
|-----------------------------------|-----------------------------------------|--------------|--------------|----------------------------|--------------|--------------------------------------|--------------|-------------------------------|--------------|----------------------------|--------------|
|                                   |                                         |              |              |                            |              | Average<br>Weekly<br>Earnings        |              | Average<br>Hourly<br>Earnings |              | Average<br>Weekly<br>Hours |              |
|                                   | Mar.<br>1984                            | Feb.<br>1984 | Mar.<br>1983 | Feb.<br>1984               | Mar.<br>1983 | Mar.<br>1984                         | Feb.<br>1984 | Mar.<br>1984                  | Feb.<br>1984 | Mar.<br>1984               | Feb.<br>1984 |
| <b>TOTAL NONAGRICULTURAL</b>      | 1738.1                                  | 1725.7       | 1658.3       | 8.7                        | 4.8          |                                      |              |                               |              |                            |              |
| <b>MANUFACTURING</b>              | 352.1                                   | 349.5        | 332.9        | 8.7                        | 8.8          | 190.98                               | 391.64       | 9.63                          | 9.67         | 40.6                       | 40.5         |
| Durable Goods                     | 211.7                                   | 209.7        | 197.5        | 7.0                        | 7.2          | 402.55                               | 403.80       | 9.70                          | 9.73         | 41.5                       | 41.5         |
| Furniture, Lumber and Wood        | 14.6                                    | 14.4         | 13.9         | 2.7                        | 6.1          | 196.60                               | 400.07       | 9.99                          | 10.18        | 39.7                       | 39.1         |
| Stone, Clay and Glass             | 8.1                                     | 7.9          | 7.0          | 2.6                        | 16.0         | 370.36                               | 365.39       | 9.85                          | 9.85         | 37.6                       | 37.4         |
| Primary Metals                    | 5.8                                     | 5.7          | 5.1          | 3.7                        | 12.2         | 373.35                               | 388.00       | 9.04                          | 9.11         | 41.3                       | 42.7         |
| Fabricated Metals                 | 33.3                                    | 33.0         | 31.7         | 0.9                        | 4.5          | 459.44                               | 447.28       | 10.90                         | 10.83        | 41.6                       | 41.1         |
| Nonelectrical Machinery           | 84.7                                    | 84.6         | 77.4         | 7.1                        | 9.4          | 421.88                               | 424.72       | 9.95                          | 9.97         | 42.4                       | 42.6         |
| Electrical Machinery              | 26.9                                    | 26.3         | 25.2         | 7.7                        | 6.5          | 317.43                               | 334.55       | 8.19                          | 8.22         | 41.2                       | 40.7         |
| Transportation Equipment          | 6.8                                     | 6.7          | 6.5          | 1.7                        | 3.2          | 354.54                               | 454.96       | 10.62                         | 10.63        | 42.9                       | 42.8         |
| Other Durable Goods <sup>2/</sup> | 31.3                                    | 31.1         | 31.5         | 0.8                        | -0.5         | 176.89                               | 377.27       | 8.91                          | 8.94         | 42.3                       | 42.2         |
| Nondurable Goods                  | 140.4                                   | 139.9        | 135.4        | 0.4                        | 3.7          | 374.83                               | 376.12       | 9.53                          | 9.60         | 39.3                       | 39.2         |
| Food and Kindred                  | 42.8                                    | 42.9         | 41.2         | -0.1                       | -4.0         | 334.31                               | 334.37       | 8.55                          | 8.69         | 39.1                       | 38.5         |
| Textile and Apparel               | 4.8                                     | 4.8          | 4.7          | 0.7                        | 2.2          | 229.12                               | 231.58       | 6.40                          | 6.31         | 35.8                       | 36.7         |
| Paper and Allied                  | 32.8                                    | 32.7         | 31.7         | 0.3                        | 3.4          | 472.20                               | 473.90       | 10.97                         | 10.97        | 43.5                       | 43.2         |
| Printing and Publishing           | 37.9                                    | 37.6         | 35.3         | 1.0                        | 7.6          | 367.50                               | 371.64       | 10.18                         | 10.21        | 36.1                       | 36.4         |
| Chemical and Petroleum            | 9.4                                     | 9.2          | 9.2          | 1.3                        | 7.1          | 431.01                               | 458.64       | 10.59                         | 10.92        | 40.7                       | 42.0         |
| Rubber and Leather                | 12.7                                    | 12.6         | 11.4         | 0.1                        | 11.9         | 315.54                               | 311.12       | 8.07                          | 8.06         | 39.1                       | 38.6         |
| <b>NONMANUFACTURING</b>           | 1386.0                                  | 1376.2       | 1325.4       | 0.7                        | 4.6          |                                      |              |                               |              |                            |              |
| Mining and Quarrying              | 9.8                                     | 8.9          | 7.7          | 10.4                       | 26.5         | 467.13                               | 469.56       | 12.94                         | 12.90        | 36.1                       | 36.4         |
| Metal Mining                      | 8.3                                     | 7.6          | 6.5          | 9.9                        | 28.6         | 484.27                               | 492.17       | 13.68                         | 13.52        | 35.4                       | 36.4         |
| Construction                      | 51.8                                    | 49.8         | 45.1         | 3.9                        | 4.8          | 568.25                               | 574.05       | 15.40                         | 15.39        | 36.9                       | 37.3         |
| Building                          | 15.6                                    | 15.6         | 13.7         | 1.1                        | 13.4         | 547.21                               | 548.70       | 14.71                         | 14.75        | 37.2                       | 37.2         |
| Highway and Heavy                 | 5.5                                     | 4.7          | 4.6          | 18.9                       | 28.4         | 488.81                               | 488.12       | 13.14                         | 12.74        | 37.2                       | 38.0         |
| Special Trades                    | 10.5                                    | 29.6         | 26.9         | 5.2                        | 12.7         | 542.92                               | 603.13       | 16.70                         | 16.11        | 35.5                       | 41.3         |
| Transportation                    | 59.0                                    | 58.6         | 57.1         | 0.7                        | 2.6          |                                      |              |                               |              |                            |              |
| Railroads                         | 8.9                                     | 10.1         | 10.8         | -1.0                       | -8.6         | 541.46                               | 541.86       | 11.80                         | 11.78        | 36.1                       | 36.0         |
| Trucking and Warehousing          | 23.4                                    | 23.2         | 22.1         | 0.9                        | 5.1          | 411.48                               | 412.87       | 12.42                         | 11.88        | 38.5                       | 38.5         |
| Public Utilities                  | 14.6                                    | 14.5         | 14.5         | 0.1                        | 0.0          | 411.48                               | 412.87       | 12.42                         | 11.88        | 38.5                       | 38.5         |
| Communications                    | 29.2                                    | 23.9         | 19.7         | 11.1                       | 21.3         | 411.48                               | 412.87       | 12.42                         | 11.88        | 38.5                       | 38.5         |
| Elec., Gas and Sanitary           | 14.6                                    | 14.5         | 14.5         | 0.1                        | 0.0          | 411.48                               | 412.87       | 12.42                         | 11.88        | 38.5                       | 38.5         |
| Trade                             | 429.1                                   | 424.2        | 411.0        | 8.0                        | 8.4          | 224.19                               | 223.17       | 7.50                          | 7.44         | 29.6                       | 29.6         |
| Retail                            | 118.7                                   | 114.9        | 105.1        | 2.1                        | 8.5          | 224.19                               | 223.17       | 7.50                          | 7.44         | 29.6                       | 29.6         |
| General Merchandise               | 44.9                                    | 45.2         | 41.4         | -0.7                       | -8.4         | 164.26                               | 164.58       | 5.23                          | 5.20         | 27.7                       | 27.8         |
| Food Stores                       | 44.3                                    | 43.7         | 40.7         | 2.1                        | 7.8          | 210.27                               | 213.41       | 7.57                          | 7.49         | 29.8                       | 29.5         |
| Automotive                        | 31.7                                    | 31.5         | 30.6         | 1.8                        | 2.8          | 291.72                               | 295.63       | 7.96                          | 7.99         | 36.9                       | 37.0         |
| Eating and Drinking               | 105.2                                   | 102.6        | 100.0        | 2.6                        | 2.6          | 44.31                                | 45.00        | 4.63                          | 4.62         | 20.2                       | 20.7         |
| Wholesale                         | 110.3                                   | 109.3        | 105.9        | 0.9                        | 3.2          | 391.47                               | 393.12       | 10.26                         | 10.24        | 38.1                       | 38.2         |
| F.I.R.E.                          | 102.6                                   | 102.2        | 98.6         | 0.4                        | 4.0          |                                      |              |                               |              |                            |              |
| Finance                           | 48.9                                    | 48.8         | 46.7         | 0.3                        | 4.7          |                                      |              |                               |              |                            |              |
| Insurance                         | 36.7                                    | 36.6         | 35.5         | 0.3                        | 3.4          |                                      |              |                               |              |                            |              |
| Real Estate                       | 17.0                                    | 16.8         | 16.1         | 1.3                        | 4.5          |                                      |              |                               |              |                            |              |
| Service Industries                | 401.0                                   | 398.9        | 380.7        | 0.5                        | 5.7          |                                      |              |                               |              |                            |              |
| Hotel and Lodging                 | 20.8                                    | 20.7         | 18.9         | 0.3                        | 10.1         |                                      |              |                               |              |                            |              |
| Business Services                 | 64.7                                    | 63.9         | 57.3         | 1.2                        | 12.9         |                                      |              |                               |              |                            |              |
| Health Services                   | 134.9                                   | 134.6        | 131.8        | 0.2                        | 2.3          |                                      |              |                               |              |                            |              |
| Private Education                 | 24.6                                    | 24.5         | 24.3         | 0.5                        | 1.4          |                                      |              |                               |              |                            |              |
| Soc. Serv., Museums etc.          | 87.4                                    | 86.8         | 82.6         | 0.7                        | 5.7          |                                      |              |                               |              |                            |              |
| Government                        | 298.3                                   | 299.5        | 291.6        | -0.4                       | 2.3          |                                      |              |                               |              |                            |              |
| Federal                           | 30.7                                    | 30.7         | 30.2         | 0                          | 1.5          |                                      |              |                               |              |                            |              |
| State                             | 74.8                                    | 76.1         | 72.9         | -1.6                       | 2.6          |                                      |              |                               |              |                            |              |
| Local                             | 192.7                                   | 192.7        | 188.4        | 0                          | 2.3          |                                      |              |                               |              |                            |              |

<sup>1/</sup> Totals may not add because of rounding.

<sup>2/</sup> Includes Scientific Instruments and Miscellaneous Industries.

# Labor Force Data: State, SMSAs, and Counties

| Area or County                            | March, 1984 Prelim.          |        |             | Area or County          | March, 1984 Prelim.          |        |             |
|-------------------------------------------|------------------------------|--------|-------------|-------------------------|------------------------------|--------|-------------|
|                                           | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |                         | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |
| State of Minnesota                        | 2161604                      | 152283 | 7.1         | Lake                    | 4135                         | 790    | 19.3        |
| Metropolitan Areas                        |                              |        |             | Lake of the Woods       | 1817                         | 190    | 10.5        |
| Duluth/Superior<br>(Duluth City Only)     | 35062                        | 3816   | 10.9        | Le Sueur                | 11001                        | 1297   | 11.8        |
| Fargo/Moorhead<br>(Fargo County, MN Only) | 28166                        | 2018   | 7.2         | Lincoln                 | 3715                         | 338    | 9.1         |
| Minneapolis/St. Paul SMSA <sup>2/</sup>   | 1195203                      | 86531  | 5.1         | Lyon                    | 14791                        | 1003   | 6.8         |
| Rochester SMSA (Olmeda Co.)               | 58787                        | 2816   | 4.8         | McLeod                  | 16212                        | 1281   | 7.9         |
| St. Cloud SMSA <sup>3/</sup>              | 78829                        | 8949   | 8.8         | Mannomen                | 2891                         | 392    | 13.6        |
| Counties                                  |                              |        |             | Marshall                | 6194                         | 1094   | 17.7        |
| Aitkin                                    | 5398                         | 1176   | 21.8        | Martine                 | 13383                        | 882    | 6.6         |
| Anoka                                     | 41704                        | 8297   | 5.5         | Meeker                  | 10501                        | 1375   | 13.1        |
| Becker                                    | 12599                        | 7320   | 18.5        | Miller Lacs             | 8500                         | 899    | 10.6        |
| Bellinger                                 | 16082                        | 1537   | 9.6         | Morrison                | 12541                        | 1577   | 12.6        |
| Benton                                    | 12186                        | 1096   | 5.8         | Mower                   | 17943                        | 1371   | 7.6         |
| Big Stone                                 | 3767                         | 328    | 8.7         | Murray                  | 5970                         | 619    | 10.4        |
| Blue Earth                                | 28350                        | 1550   | 5.6         | Nicollet                | 14634                        | 859    | 5.9         |
| Brown                                     | 14681                        | 1112   | 7.6         | Redwood                 | 11762                        | 657    | 7.1         |
| Carlton                                   | 11750                        | 1469   | 12.5        | Norman                  | 4502                         | 430    | 9.7         |
| Carver                                    | 21647                        | 1341   | 6.2         | Olmeda                  | 58787                        | 2835   | 4.8         |
| Cass                                      | 9556                         | 1283   | 13.4        | Otter Tail              | 24729                        | 3350   | 13.5        |
| Chippewa                                  | 7400                         | 576    | 9.1         | Pennington              | 6290                         | 645    | 10.3        |
| Chisago                                   | 15123                        | 1430   | 9.2         | Pine                    | 9665                         | 1389   | 14.4        |
| Clay                                      | 28166                        | 2018   | 7.2         | Pipestone               | 5514                         | 331    | 6.0         |
| Clearwater                                | 4191                         | 1048   | 25.0        | Polk                    | 17311                        | 1700   | 9.8         |
| Cook                                      | 2167                         | 330    | 15.1        | Pope                    | 5202                         | 501    | 9.6         |
| Cottonwood                                | 1205                         | 467    | 6.8         | Ramsey                  | 264818                       | 12856  | 4.9         |
| Crow Wing                                 | 16625                        | 2067   | 12.4        | Red Lake                | 2116                         | 365    | 17.2        |
| Dakota                                    | 11248                        | 895    | 5.2         | Redwood                 | 10253                        | 662    | 6.5         |
| Dodge                                     | 7692                         | 289    | 12.1        | Renville                | 11016                        | 935    | 8.5         |
| Douglas                                   | 8837                         | 1514   | 8.7         | Rice                    | 13861                        | 2096   | 8.8         |
| Fartherly                                 | 28166                        | 2018   | 7.2         | Rock                    | 5585                         | 277    | 5.0         |
| Fillingim                                 | 12599                        | 7320   | 18.5        | Roseau                  | 5650                         | 730    | 13.0        |
| Fredrick                                  | 12543                        | 1079   | 9.3         | St. Louis (Inc. Duluth) | 85683                        | 18768  | 22.1        |
| Goddard                                   | 7877                         | 1740   | 7.1         | Scott                   | 35797                        | 1871   | 5.2         |
| Grant                                     | 12186                        | 1096   | 9.2         | Sherburne               | 14150                        | 1002   | 7.1         |
| Hennepin                                  | 840604                       | 8710   | 4.6         | Sibley                  | 8079                         | 787    | 9.8         |
| Houston                                   | 9009                         | 763    | 7.1         | Stearns                 | 12093                        | 447    | 3.8         |
| Hubbard                                   | 1423                         | 889    | 16.2        | Steele                  | 9579                         | 1230   | 12.7        |
| Isanti                                    | 10349                        | 927    | 8.9         | Stevens                 | 4761                         | 409    | 8.6         |
| Itasca                                    | 17175                        | 2204   | 12.8        | Swift                   | 6071                         | 881    | 9.2         |
| Jackson                                   | 7703                         | 447    | 5.8         | Todd                    | 11174                        | 1084   | 9.7         |
| Kanabec                                   | 5285                         | 676    | 12.8        | Traverse                | 2715                         | 241    | 8.9         |
| Kandiyohi                                 | 12960                        | 1544   | 8.8         | Wabasha                 | 3088                         | 847    | 27.4        |
| Kittson                                   | 3340                         | 396    | 11.9        | Wadena                  | 5417                         | 619    | 11.4        |
| Koochiching                               | 7399                         | 811    | 11.0        | Waseca                  | 8779                         | 668    | 7.6         |
| Lac qui Parle                             | 5571                         | 375    | 6.7         | Washington              | 81610                        | 3279   | 4.0         |
|                                           |                              |        |             | Watowin                 | 6681                         | 526    | 7.9         |
|                                           |                              |        |             | Willin                  | 4206                         | 341    | 8.1         |
|                                           |                              |        |             | Winona                  | 22099                        | 2021   | 9.1         |
|                                           |                              |        |             | Wright                  | 35351                        | 3040   | 8.6         |
|                                           |                              |        |             | Yellow Medicine         | 7379                         | 590    | 8.0         |

## Technical Notes:

1/ Labor force data is computed according to BLS methodology. The method includes an adjustment to assure that the sum of the substate areas equals the separately estimated State total. This adjustment is Applied to all county and SMSA areas. County and area unemployment was multiplied by an adjustment factor of 1.42, employment was multiplied by 1.03. For a more detailed explanation see the Review of Labor and Economic Conditions, Vol. 4, No. 4, (February 1978 issue), p. 29.

2/ Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright Counties.

3/ Benton, Sherburne, and Stearns Counties.

# Selected Minnesota Program Statistics

## Characteristics of the Insured Unemployed

Tables 1 and 2 provide data on persons who filed a claim for unemployment compensation in Minnesota during the month. Only those claiming benefits from the regular State program are represented since data on the characteristics of Federal employees and veterans are not available.

The total number of claimants for unemployment benefits fell by 4,180 or 7.4 percent in March. Although the numerical decline this March was not as large as in March 1983, the percentage drop was the steepest since March 1979. A little over half of the March decrease was among claimants in the Construction and Manufacturing industries. The largest March decline in percentage terms was among claimants in the Mining industry. Over-the-year, the total number of claimants dropped by 25,756 or 33 percent. Claimants have now shown over-the-year declines for thirteen straight months. The largest decreases from a year ago were in Manufacturing, Retail Trade and Construction.

Table 1. Distribution of Insured Unemployed, By Age and Sex, March, 1984

| Age Groups  | Number | Percent Distributions |            |                |
|-------------|--------|-----------------------|------------|----------------|
|             |        | Men of Totals         | Men of Men | Women of Women |
| TOTALS      | 52246  | 78.0                  | 100.0      | 100.0          |
| Under 45    | 39812  | 79.2                  | 77.3       | 72.2           |
| Under 25    | 9904   | 78.1                  | 18.9       | 18.9           |
| 25-34       | 19640  | 81.1                  | 39.1       | 32.3           |
| 35-44       | 10268  | 76.5                  | 19.3       | 23.0           |
| 45 and Over | 12434  | 74.4                  | 22.7       | 27.8           |
| 45-54       | 6940   | 75.4                  | 12.8       | 14.9           |
| 55 and Over | 5494   | 73.1                  | 9.9        | 12.9           |

## Job Service Applicant Supply and Demand

Table 3 compares Job Service (J.S.) job applicants with the J.S. job openings that existed at the end of the month. These comparisons are expressed as supply/demand ratios. Other things being equal, the greater the ratio of applicants to openings, the greater the competition has been for work within that occupational category. To put these ratios into context, the reader must remember that not only do job seekers and employers in general find jobs or recruit workers through other means, but those interested in certain kinds of jobs are particularly unlikely to use the J.S. For example, workers seeking professional and Managerial jobs are least likely to use the J.S., whereas employers usually recruit construction workers through union halls and hire teachers directly. Thus, the main value of Table 3 is that it reflects, for broad occupational groups, the relative labor market conditions that those using the J.S. encountered when seeking work.

Table 2. Distribution of Insured Unemployed By Industry and Occupation, March, 1984

| Industry and Occupational Attachment | Number | Percent of Total | Percent Long-Term Unemployed <sup>1/</sup> | Women as Percent of Total |
|--------------------------------------|--------|------------------|--------------------------------------------|---------------------------|
| Total, All Industries                | 52246  | 100.0            | 24.3                                       | 22.1                      |
| Ag., For., Fish.                     | 1620   | 3.1              | 38.5                                       | 9.6                       |
| Mining                               | 1101   | 2.3              | 36.5                                       | 4.9                       |
| Construction                         | 18326  | 35.2             | 23.6                                       | 2.4                       |
| Manufacturing                        | 11613  | 22.2             | 20.1                                       | 30.9                      |
| Pub. Utilities                       | 2301   | 4.4              | 20.5                                       | 12.0                      |
| Wholesale Trade                      | 2793   | 5.3              | 28.1                                       | 22.0                      |
| Retail Trade                         | 5240   | 10.0             | 25.9                                       | 40.0                      |
| Fin., Ins., Real Est.                | 979    | 1.9              | 32.4                                       | 50.1                      |
| Services                             | 6431   | 12.3             | 25.7                                       | 52.7                      |
| Public Admin.                        | 1052   | 2.0              | 31.6                                       | 26.4                      |
| Inf. Not Available                   | 660    | 1.3              | 2.0                                        | 25.0                      |
| Total, All Occupations               | 52246  | 100.0            | 24.3                                       | 22.1                      |
| Prof., Tech., Mgr.                   | 4525   | 8.7              | 27.5                                       | 39.9                      |
| Clerical                             | 3824   | 7.3              | 27.8                                       | 79.8                      |
| Sales                                | 1465   | 2.8              | 27.6                                       | 34.3                      |
| Services                             | 3209   | 6.1              | 27.7                                       | 55.1                      |
| Farm., For., Fish.                   | 1407   | 2.7              | 43.2                                       | 10.0                      |
| Processing                           | 2817   | 5.4              | 13.5                                       | 38.9                      |
| Machine Trades                       | 2391   | 4.6              | 23.2                                       | 11.8                      |
| Benchwork                            | 3189   | 6.1              | 22.4                                       | 63.8                      |
| Structural Work                      | 19396  | 37.1             | 22.7                                       | 1.4                       |
| Misc.                                | 9597   | 18.4             | 24.5                                       | 8.8                       |
| Inf. Not Available                   | 476    | 0.9              | 22.7                                       | 29.5                      |

<sup>1/</sup> Long-Term unemployed refers to unemployment insurance claimants whose current spell of unemployment has lasted 15 weeks or longer.

Table 3. Experienced Supply/Job Openings Demand <sup>1/</sup>

| Occupation          | Applicants (Supply)<br>March 1984 | Job Openings (Demand)<br>March 1984 | Supply/Demand Ratio |            |
|---------------------|-----------------------------------|-------------------------------------|---------------------|------------|
|                     |                                   |                                     | March 1984          | March 1983 |
| Total               | 107747                            | 12287                               | 8.8                 | 11.8       |
| Prof., Tech., Mgr.  | 13071                             | 1467                                | 8.9                 | 11.2       |
| Clerical            | 17209                             | 2496                                | 6.9                 | 8.2        |
| Sales               | 4891                              | 1500                                | 3.3                 | 4.9        |
| Dom. Services       | 1431                              | 140                                 | 10.2                | 3.1        |
| Other Services      | 16673                             | 2413                                | 6.9                 | 9.1        |
| Farm., Fish., For.  | 2558                              | 145                                 | 17.6                | 5.8        |
| Processing          | 2587                              | 456                                 | 5.7                 | 8.4        |
| Machine Trades      | 7418                              | 693                                 | 10.7                | 32.0       |
| Benchwork           | 6604                              | 586                                 | 11.3                | 32.2       |
| Structural Work     | 16336                             | 684                                 | 23.9                | 23.5       |
| Mtr. Frght., Trans. | 5212                              | 354                                 | 14.7                | 24.8       |
| Pkg. & Mat. Hndlg.  | 12376                             | 1296                                | 9.5                 | 16.0       |
| Other               | 1387                              | 157                                 | 24.3                | 28.1       |

<sup>1/</sup> Inexperienced and improperly coded job applicants are not included in this table.

# NOTE

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# CURRENT MINNESOTA LABOR MARKET CONDITIONS

June 1984 Supplement to The Review of Labor and Economic Conditions

Prepared by the Research and Statistical Services Office, MN Dept. of Economic Security, 390 N. Robert St., St. Paul MN 55101, in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics, and Employment and Training Admin.

## Nation

Although most of the economic statistics for May suggested that economic activity was slowing down, the data for April indicated that the economy was bouncing back to renewed robust growth. It may be a few months before a more positive determination can be made of growth behavior.

Labor market developments in May were somewhat mixed as total employment surged, while the growth of nonfarm payroll employment slowed. The surge in total employment caused the seasonally adjusted unemployment rate to drop to 7.5 percent in May after holding at 7.8 percent for three consecutive months. Although total employment (seasonally adjusted) rose by a huge 886,000 in May, the gain may have been overstated because of problems in the seasonal adjustment process. Meanwhile, seasonally adjusted nonfarm payroll employment climbed a moderate 232,000 in May following increases averaging 355,000 in each of the three previous months. The largest over-the-month gains were in services (\$9,000), construction (\$9,000), and trade (\$5,000). Employment in manufacturing rose by only 26,000 in May after considerably larger increases in earlier months.

Other economic reports for May also indicated that economic growth was decelerating. Retail sales rose only 0.2 percent in May after a jump of 3.1 in April, while industrial production climbed a modest 0.4 percent in May following a gain of 1.1 percent in April. Perhaps the best evidence of slower growth was a drop of 10.5 percent in housing starts in May.

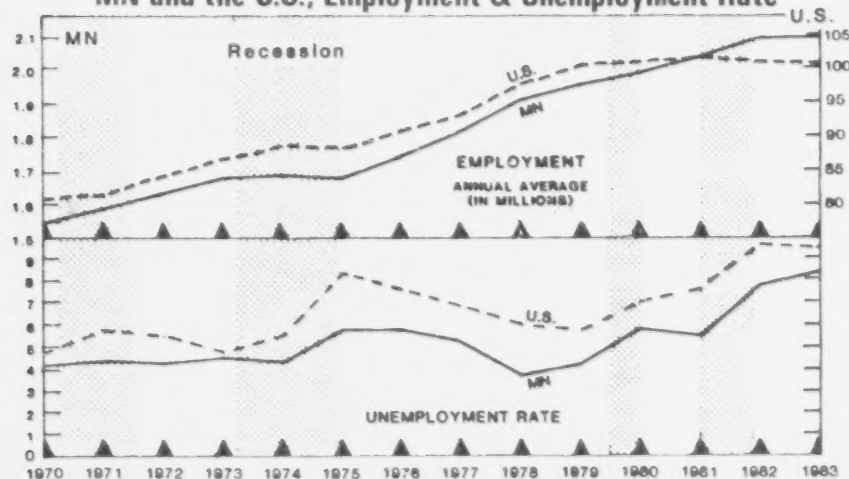
## State

Recently available seasonally adjusted labor force data show that the Minnesota employment situation continued to improve in May, but not as sharply as in earlier months. However, seasonally adjusted establishment data indicate that nonfarm wage and salary employment is still increasing at a healthy rate.

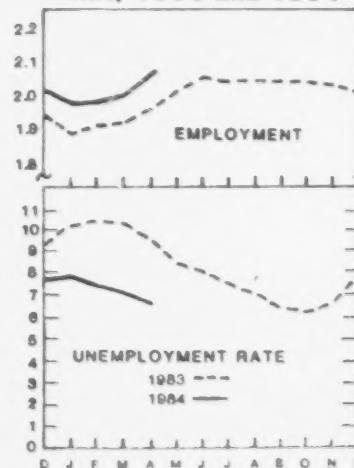
The seasonally adjusted unemployment rate edged down to 6.0 percent in May from 6.1 percent in March and April. The unadjusted rates in May, April and March were 5.8, 6.6, and 7.1 percent, respectively. Seasonally adjusted total employment rose 5,100 in May after gains of 11,800 in April and 7,500 in March. The unadjusted employment gains in May and April were 48,900 and 63,600. Nonfarm payroll employment, also seasonally adjusted, rose 11,200 in May after increases of 15,600 in April and 10,100 in March. Adjusted payroll employment has risen by 56,700 since the beginning of the year and by 121,900 since the recovery began. The largest gains during the recovery have been in manufacturing, trade, and services with each contributing about one-fourth of the total increase. Although payroll employment was 12,700 above the pre-recession all-time high of December, 1979, the only industry sectors to show increases since December, 1979 were Trade, Finance-Insurance-Real Estate and Services.

| Labor Force Estimates | MINNESOTA<br>(Numbers in '000's) |          |                  | UNITED STATES<br>(Numbers in '000,000's) |          |                  |
|-----------------------|----------------------------------|----------|------------------|------------------------------------------|----------|------------------|
|                       | May<br>1984                      | Change   |                  | May<br>1984                              | Change   |                  |
|                       |                                  | Last Mo. | From<br>Year Ago |                                          | Last Mo. | From<br>Year Ago |
| Civilian Labor Force  | 2256.6                           | 34.6     | 60.4             | 113.3                                    | 1.1      | 3.0              |
| Employed              | 2125.0                           | 48.9     | 111.8            | 105.1                                    | 1.5      | 5.6              |
| Unemployed            | 131.6                            | -14.3    | -51.4            | 8.2                                      | -0.4     | -2.6             |
| Unemployment Rate     |                                  |          |                  |                                          |          |                  |
| Actual                | 5.8                              | -0.8     | -2.5             | 7.2                                      | -0.4     | -2.6             |
| Seasonally Adjusted   | 6.0                              | -0.1     | -2.6             | 7.5                                      | -0.3     | -2.6             |

MN and the U.S., Employment & Unemployment Rate



MN, 1983 and 1984



# Minnesota Nonagricultural Wage & Salary Employment, Hours, and Earnings

| INDUSTRY                          | EMPLOYMENT <sup>1/</sup><br>(thousands) |               |             | PER CENT<br>CHANGE<br>FROM |             | PRODUCTION WORKERS' HOURS & EARNINGS |               |                               |               |                            |               |
|-----------------------------------|-----------------------------------------|---------------|-------------|----------------------------|-------------|--------------------------------------|---------------|-------------------------------|---------------|----------------------------|---------------|
|                                   |                                         |               |             |                            |             | Average<br>Weekly<br>Earnings        |               | Average<br>Hourly<br>Earnings |               | Average<br>Weekly<br>Hours |               |
|                                   | May<br>1984                             | April<br>1984 | May<br>1983 | April<br>1984              | May<br>1983 | May<br>1984                          | April<br>1984 | May<br>1984                   | April<br>1984 | May<br>1984                | April<br>1984 |
| TOTAL NONAGRICULTURAL             | 1814.4                                  | 1779.3        | 1719.6      | 2.0                        | 5.5         |                                      |               |                               |               |                            |               |
| MANUFACTURING                     | 363.4                                   | 357.7         | 341.0       | 1.6                        | 6.6         | 388.49                               | 394.28        | 9.64                          | 9.64          | 40.3                       | 40.9          |
| Durable Goods                     | 220.4                                   | 216.4         | 202.9       | 1.8                        | 8.6         | 402.11                               | 408.53        | 9.76                          | 9.75          | 41.2                       | 41.9          |
| Furniture, Lumber and Wood        | 16.2                                    | 15.4          | 14.7        | 4.6                        | 10.1        | 398.16                               | 428.24        | 10.08                         | 10.10         | 39.5                       | 42.4          |
| Stone, Clay and Glass             | 9.3                                     | 8.7           | 8.9         | 6.0                        | 4.3         | 379.50                               | 374.50        | 10.12                         | 9.96          | 37.5                       | 37.6          |
| Primary Metals                    | 6.0                                     | 6.0           | 5.4         | 1.2                        | 12.4        | 379.14                               | 393.64        | 8.90                          | 9.07          | 42.6                       | 43.4          |
| Fabricated Metals                 | 34.0                                    | 32.9          | 32.1        | 3.3                        | 5.9         | 448.03                               | 451.26        | 10.77                         | 10.77         | 41.6                       | 41.9          |
| Nonelectrical Machinery           | 86.4                                    | 86.1          | 78.5        | 0.3                        | 10.0        | 427.23                               | 427.98        | 10.10                         | 10.07         | 42.3                       | 42.5          |
| Electrical Machinery              | 28.4                                    | 27.8          | 25.5        | 2.2                        | 11.5        | 326.83                               | 333.74        | 8.13                          | 8.14          | 40.2                       | 41.0          |
| Transportation Equipment          | 7.4                                     | 7.2           | 6.1         | 2.4                        | 20.8        | 461.38                               | 478.30        | 10.78                         | 10.92         | 42.8                       | 43.8          |
| Other Durable Goods <sup>2/</sup> | 32.8                                    | 32.3          | 31.7        | 1.5                        | 3.4         | 372.60                               | 375.42        | 9.00                          | 8.96          | 41.4                       | 41.9          |
| Nondurable Goods                  | 143.0                                   | 141.3         | 138.1       | 1.2                        | 3.6         | 370.67                               | 375.80        | 9.48                          | 9.49          | 39.1                       | 39.6          |
| Food and Kindred                  | 43.7                                    | 42.6          | 43.7        | 2.6                        | 0           | 324.42                               | 338.91        | 8.56                          | 8.58          | 37.9                       | 39.5          |
| Textile and Apparel               | 5.2                                     | 5.0           | 4.9         | 4.2                        | 6.4         | 247.11                               | 253.36        | 6.32                          | 6.53          | 39.1                       | 38.8          |
| Paper and Allied                  | 33.0                                    | 32.9          | 32.3        | 0.2                        | 2.2         | 474.47                               | 477.60        | 11.06                         | 11.03         | 42.9                       | 43.3          |
| Printing and Publishing           | 39.2                                    | 38.8          | 36.0        | 1.0                        | 8.8         | 362.11                               | 360.14        | 9.84                          | 9.84          | 36.8                       | 36.6          |
| Chemical and Petroleum            | 9.4                                     | 9.4           | 9.5         | 0                          | -0.9        | 461.16                               | 439.70        | 10.98                         | 10.83         | 42.0                       | 40.6          |
| Rubber and Leather                | 12.6                                    | 12.6          | 11.8        | 0                          | 6.8         | 315.93                               | 315.09        | 8.08                          | 8.10          | 39.1                       | 38.9          |
| NONMANUFACTURING                  | 1451.0                                  | 1421.6        | 1378.7      | 2.1                        | 5.2         |                                      |               |                               |               |                            |               |
| Mining and Quarrying              | 10.7                                    | 10.2          | 9.5         | 4.7                        | 13.0        | 514.65                               | 503.37        | 13.23                         | 12.94         | 38.9                       | 38.9          |
| Metal Mining                      | 8.6                                     | 8.4           | 7.5         | 1.5                        | 14.8        | 539.00                               | 525.86        | 14.11                         | 13.73         | 38.2                       | 38.3          |
| Construction                      | 69.2                                    | 59.3          | 59.6        | 16.6                       | 16.2        | 570.40                               | 556.09        | 15.13                         | 15.49         | 37.7                       | 35.9          |
| Building                          | 18.6                                    | 17.3          | 16.5        | 7.8                        | 13.1        | 526.02                               | 510.11        | 13.99                         | 14.41         | 37.6                       | 35.4          |
| Highway and Heavy                 | 12.4                                    | 7.8           | 10.7        | 57.6                       | 15.4        | 502.52                               | 458.02        | 12.69                         | 12.48         | 39.6                       | 36.7          |
| Special Trades                    | 38.2                                    | 34.2          | 32.4        | 11.6                       | 18.0        | 616.40                               | 602.04        | 16.57                         | 16.77         | 37.2                       | 35.9          |
| Transportation                    | 62.3                                    | 61.2          | 59.9        | 1.8                        | 4.0         |                                      |               |                               |               |                            |               |
| Railroads                         | 10.2                                    | 10.0          | 11.1        | 2.0                        | -7.4        | 540.50                               | 540.50        | 11.75                         | 11.75         | 46.0                       | 46.0          |
| Trucking and Warehousing          | 24.4                                    | 23.9          | 23.4        | 2.2                        | 4.3         | 433.64                               | 423.54        | 11.72                         | 11.70         | 37.0                       | 36.2          |
| Public Utilities                  | 34.4                                    | 34.2          | 33.9        | 0.7                        | 1.4         | 511.03                               | 511.73        | 12.84                         | 12.89         | 39.8                       | 39.7          |
| Communications                    | 20.1                                    | 19.9          | 20.0        | 1.0                        | 0.5         | 468.03                               | 469.22        | 11.97                         | 11.97         | 39.1                       | 39.2          |
| Elec., Gas and Sanitary           | 14.3                                    | 14.3          | 14.0        | 0.3                        | 2.7         | 563.29                               | 562.19        | 13.84                         | 13.95         | 40.7                       | 40.3          |
| Trade                             | 452.7                                   | 442.2         | 428.5       | 2.4                        | 5.6         | 225.45                               | 227.10        | 7.49                          | 7.52          | 30.1                       | 30.2          |
| Retail                            | 339.1                                   | 329.8         | 319.4       | 2.8                        | 6.2         | 180.14                               | 181.63        | 6.48                          | 6.51          | 27.8                       | 27.9          |
| General Merchandise               | 47.3                                    | 46.1          | 43.8        | 2.6                        | 8.1         | 160.16                               | 163.85        | 5.91                          | 5.98          | 27.1                       | 27.4          |
| Food Stores                       | 45.6                                    | 44.6          | 44.9        | 2.1                        | 1.5         | 216.41                               | 218.22        | 7.62                          | 7.63          | 28.4                       | 28.6          |
| Automotive                        | 35.7                                    | 35.1          | 33.9        | 1.7                        | 5.3         | 314.91                               | 308.90        | 8.42                          | 8.44          | 37.4                       | 36.6          |
| Eating and Drinking               | 116.2                                   | 111.4         | 107.8       | 4.3                        | 7.8         | 106.24                               | 107.39        | 4.68                          | 4.71          | 22.7                       | 22.8          |
| Wholesale                         | 113.6                                   | 112.4         | 109.1       | 1.0                        | 4.1         | 392.56                               | 389.38        | 10.17                         | 10.14         | 38.6                       | 38.4          |
| F.I.R.E.                          | 105.3                                   | 104.4         | 100.6       | 0.8                        | 4.7         |                                      |               |                               |               |                            |               |
| Finance                           | 49.1                                    | 48.9          | 47.7        | 0.3                        | 3.0         |                                      |               |                               |               |                            |               |
| Insurance                         | 37.5                                    | 37.4          | 35.6        | 0.4                        | 5.3         |                                      |               |                               |               |                            |               |
| Real Estate                       | 18.7                                    | 18.1          | 17.3        | 3.1                        | 8.2         |                                      |               |                               |               |                            |               |
| Service Industries                | 414.7                                   | 409.5         | 391.8       | 1.3                        | 5.8         |                                      |               |                               |               |                            |               |
| Hotel and Lodging                 | 23.4                                    | 21.8          | 20.9        | 7.3                        | 12.0        |                                      |               |                               |               |                            |               |
| Business Services                 | 67.5                                    | 66.7          | 60.6        | 1.2                        | 11.4        |                                      |               |                               |               |                            |               |
| Health Services                   | 135.3                                   | 135.5         | 132.6       | -0.1                       | 2.1         |                                      |               |                               |               |                            |               |
| Private Education                 | 24.7                                    | 25.0          | 24.1        | -1.2                       | 2.5         |                                      |               |                               |               |                            |               |
| Soc. Serv., Museums etc.          | 88.5                                    | 88.1          | 83.4        | 0.5                        | 6.1         |                                      |               |                               |               |                            |               |
| Government                        | 301.8                                   | 300.7         | 295.0       | 0.4                        | 2.3         |                                      |               |                               |               |                            |               |
| Federal                           | 31.1                                    | 31.0          | 30.6        | 0.6                        | 1.8         |                                      |               |                               |               |                            |               |
| State                             | 76.3                                    | 75.9          | 74.2        | 0.5                        | 2.8         |                                      |               |                               |               |                            |               |
| Local                             | 194.4                                   | 193.9         | 190.3       | 0.3                        | 2.2         |                                      |               |                               |               |                            |               |

<sup>1/</sup> Totals may not add because of rounding.

<sup>2/</sup> Includes Scientific Instruments and Miscellaneous Industries.

# Labor Force Data: State, SMSAs, and Counties

| Area or County                             | May, 1984 Prelim.            |        |             | Area or County          | May, 1984 Prelim.            |        |             |
|--------------------------------------------|------------------------------|--------|-------------|-------------------------|------------------------------|--------|-------------|
|                                            | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |                         | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |
| State of Minnesota                         | 2256588                      | 131566 | 5.8         | Lake                    | 4387                         | 675    | 15.4        |
| Metropolitan Areas                         |                              |        |             | Lake of the Woods       | 2059                         | 185    | 9.0         |
| Duluth/Superior<br>(Duluth City Only)      | 36644                        | 3469   | 9.5         | Le Sueur                | 12006                        | 1053   | 8.8         |
| Fargo/Moorhead<br>(Clay County, MN Only)   | 28740                        | 1622   | 5.6         | Lincoln                 | 4261                         | 258    | 6.1         |
| Minneapolis/St. Paul SMSA <sup>2/</sup>    | 1229006                      | 55016  | 4.5         | Lyon                    | 16261                        | 863    | 5.3         |
| Rochester SMSA <sup>3/</sup> (Olmsted Co.) | 60071                        | 2551   | 4.2         | McLeod                  | 17103                        | 994    | 5.8         |
| St. Cloud SMSA <sup>3/</sup>               | 81758                        | 5496   | 6.7         | Mahnomen                | 3139                         | 332    | 10.6        |
| Counties                                   |                              |        |             | Marshall                | 6849                         | 883    | 12.9        |
| Aitkin                                     | 5636                         | 914    | 16.2        | Martin                  | 14398                        | 815    | 5.7         |
| Anoka                                      | 116858                       | 5719   | 4.9         | Meeker                  | 11189                        | 1164   | 10.4        |
| Becker                                     | 13079                        | 1517   | 11.6        | Mille Lacs              | 9080                         | 724    | 8.0         |
| Beltrami                                   | 17030                        | 1385   | 8.1         | Morrison                | 13625                        | 1204   | 8.8         |
| Benton                                     | 12562                        | 816    | 6.5         | Mower                   | 19040                        | 1553   | 8.2         |
| Big Stone                                  | 4272                         | 279    | 6.5         | Murray                  | 6558                         | 435    | 6.6         |
| Blue Earth                                 | 29639                        | 1339   | 4.5         | Nicollet                | 15241                        | 674    | 4.4         |
| Brown                                      | 15581                        | 904    | 5.8         | Nobles                  | 12786                        | 732    | 5.7         |
| Carlton                                    | 12214                        | 1394   | 11.4        | Norman                  | 4937                         | 310    | 6.3         |
| Carver                                     | 21946                        | 939    | 4.3         | Olmsted                 | 60071                        | 2551   | 4.2         |
| Cass                                       | 11219                        | 1016   | 9.1         | Otter Tail              | 26134                        | 2241   | 8.6         |
| Chippewa                                   | 7939                         | 454    | 5.7         | Pennington              | 6444                         | 557    | 8.6         |
| Chisago                                    | 15472                        | 889    | 5.7         | Pine                    | 10262                        | 1040   | 10.1        |
| Clay                                       | 28740                        | 1622   | 5.6         | Pipestone               | 5996                         | 265    | 4.4         |
| Clearwater                                 | 4410                         | 762    | 17.3        | Polk                    | 18297                        | 1667   | 9.1         |
| Cook                                       | 2493                         | 275    | 11.0        | Pope                    | 5884                         | 366    | 6.2         |
| Cottonwood                                 | 7833                         | 409    | 5.2         | Ramsey                  | 273496                       | 12780  | 4.7         |
| Crow Wing                                  | 18022                        | 1567   | 8.7         | Red Lake                | 2393                         | 336    | 14.0        |
| Dakota                                     | 114760                       | 4691   | 4.1         | Redwood                 | 11204                        | 559    | 5.0         |
| Dodge                                      | 8681                         | 661    | 7.6         | Renville                | 12241                        | 985    | 8.0         |
| Douglas                                    | 14321                        | 891    | 6.2         | Rice                    | 24807                        | 1706   | 6.9         |
| Faribault                                  | 11154                        | 637    | 5.7         | Rock                    | 6198                         | 190    | 3.1         |
| Fillmore                                   | 12956                        | 815    | 6.3         | Roseau                  | 6341                         | 591    | 9.4         |
| Freeborn                                   | 18885                        | 1642   | 8.7         | St. Louis (Inc. Duluth) | 88866                        | 9432   | 10.6        |
| Goodhue                                    | 20907                        | 1138   | 5.7         | Scott                   | 25941                        | 1114   | 4.3         |
| Grant                                      | 3717                         | 205    | 5.5         | Sherburne               | 14951                        | 980    | 6.6         |
| Hennepin                                   | 558230                       | 24413  | 4.4         | Sibley                  | 8889                         | 602    | 6.8         |
| Houston                                    | 10747                        | 566    | 5.3         | Stearns                 | 54245                        | 3700   | 6.8         |
| Hubbard                                    | 5966                         | 653    | 10.9        | Steele                  | 17155                        | 986    | 5.7         |
| Isanti                                     | 10857                        | 725    | 6.7         | Stevens                 | 6237                         | 281    | 4.5         |
| Itasca                                     | 17465                        | 2036   | 11.7        | Swift                   | 6817                         | 627    | 9.2         |
| Jackson                                    | 8329                         | 372    | 4.5         | Todd                    | 12206                        | 898    | 7.4         |
| Kanabec                                    | 5730                         | 557    | 9.7         | Traverse                | 3057                         | 156    | 5.1         |
| Kandiyohi                                  | 19412                        | 1188   | 6.1         | Wabasha                 | 10271                        | 790    | 7.7         |
| Kittson                                    | 3601                         | 320    | 8.9         | Wadena                  | 5719                         | 452    | 7.9         |
| Koochiching                                | 7856                         | 829    | 10.6        | Waseca                  | 9435                         | 462    | 4.9         |
| Lac qui Parle                              | 6183                         | 332    | 5.4         | Washington              | 67066                        | 2667   | 4.0         |
|                                            |                              |        |             | Watsonwan               | 7072                         | 482    | 6.8         |
|                                            |                              |        |             | Wilkin                  | 4565                         | 272    | 6.0         |
|                                            |                              |        |             | Winona                  | 23237                        | 1800   | 7.7         |
|                                            |                              |        |             | Wright                  | 35237                        | 1804   | 5.1         |
|                                            |                              |        |             | Yellow Medicine         | 8233                         | 446    | 5.4         |

## Technical Notes:

1/ Labor force data is computed according to BLS methodology. The method includes an adjustment to assure that the sum of the substate areas equals the separately estimated State total. This adjustment is applied to all county and SMSA areas. County and area unemployment was multiplied by an adjustment factor of 1.54; employment was multiplied by 1.03. For a more detailed explanation see the Review of Labor and Economic Conditions, Vol. 4, No. 4, (February 1978 issue), p. 29.

2/ Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright Counties.

3/ Benton, Sherburne, and Stearns Counties.

## Selected Minnesota Program Statistics

### Characteristics of the Insured Unemployed

Tables 1 and 2 provide data on persons who filed a claim for unemployment compensation in Minnesota during the month. Only those claiming benefits from the regular State program are represented since data on the characteristics of Federal employees and veterans are not available.

Claimants for unemployment benefits fell by 12,553 or 29.7 percent in May to a comparatively low level of 29,772. The more current May figure was not far above the levels of the corresponding months in 1978 and 1979 when the economy was quite strong. However, a sizeable part of the improvement over the past year may have been the result of workers exhausting their benefits. Over half of the May decline was among claimants in the construction industry. There were also substantial decreases among claimants in manufacturing and retail trade. Over-the-year, the total number of claimants fell by 14,857 or 33.3 percent. The largest declines from a year ago were in manufacturing (5,052), retail trade (2,281) and construction (2,063). The very strong percentage drop in mining claimants was primarily due to the exhaustion of benefits.

**Table 1. Distribution of Insured Unemployed, By Age and Sex, May, 1984**

| Age Groups  | Number | Percent Distributions |            |                |
|-------------|--------|-----------------------|------------|----------------|
|             |        | Men of Totals         | Men of Men | Women of Women |
| TOTALS      | 29772  | 65.2                  | 100.0      | 100.0          |
| Under 45    | 22334  | 67.5                  | 76.5       | 72.1           |
| Under 25    | 5027   | 66.1                  | 16.9       | 16.9           |
| 25-34       | 11047  | 69.5                  | 39.0       | 33.4           |
| 35-44       | 6260   | 65.0                  | 20.6       | 21.8           |
| 45 and Over | 7438   | 62.2                  | 23.5       | 27.9           |
| 45-54       | 4084   | 62.0                  | 12.9       | 15.4           |
| 55 and Over | 3354   | 62.4                  | 10.6       | 12.5           |

**Table 2. Distribution of Insured Unemployed By Industry and Occupation, May, 1984**

| Industry and Occupational Attachment | Number | Percent of Total | Percent Long-Term <sup>1/</sup> Unemployed | Women as Percent of Total |
|--------------------------------------|--------|------------------|--------------------------------------------|---------------------------|
| Total, All Industries                | 29772  | 100.0            | 26.3                                       | 34.3                      |
| Ag., For., Fish.                     | 351    | 1.2              | 41.5                                       | 23.9                      |
| Mining                               | 271    | 0.9              | 56.0                                       | 9.6                       |
| Construction                         | 5930   | 19.9             | 30.3                                       | 4.1                       |
| Manufacturing                        | 8718   | 29.3             | 22.5                                       | 36.6                      |
| Pub. Utilities                       | 1441   | 4.8              | 24.3                                       | 19.5                      |
| Wholesale Trade                      | 1968   | 6.6              | 27.0                                       | 29.5                      |
| Retail Trade                         | 3734   | 12.6             | 32.0                                       | 44.4                      |
| Fin., Ins., Real Est.                | 872    | 2.9              | 28.9                                       | 56.6                      |
| Services                             | 5540   | 18.6             | 23.3                                       | 58.0                      |
| Public Admin.                        | 526    | 1.8              | 23.7                                       | 42.4                      |
| Inf. Not Available                   | 421    | 1.4              | 4.8                                        | 31.7                      |
| Total, All Occupations               | 29772  | 100.0            | 26.3                                       | 34.3                      |
| Prof., Tech., Mgr.                   | 4097   | 13.8             | 27.4                                       | 43.7                      |
| Clerical                             | 3532   | 11.9             | 26.6                                       | 82.0                      |
| Sales                                | 1287   | 4.3              | 30.8                                       | 35.1                      |
| Services                             | 2382   | 8.0              | 25.9                                       | 56.9                      |
| Farm., For., Fish.                   | 339    | 1.1              | 29.4                                       | 10.8                      |
| Processing                           | 1854   | 6.2              | 20.8                                       | 43.3                      |
| Machine Trades                       | 1808   | 6.1              | 22.5                                       | 15.4                      |
| Benchwork                            | 2582   | 8.7              | 25.8                                       | 58.5                      |
| Structural Work                      | 6950   | 23.3             | 28.2                                       | 2.5                       |
| Misc.                                | 4624   | 15.5             | 25.0                                       | 16.0                      |
| Inf. Not Available                   | 317    | 1.1              | 32.3                                       | 41.9                      |

<sup>1/</sup> Long-Term unemployed refers to unemployment insurance claimants whose current spell of unemployment has lasted 15 weeks or longer.

### Job Service Applicant Supply and Demand

Table 3 compares Job Service (J.S.) job applicants with the J.S. job openings that existed at the end of the month. These comparisons are expressed as supply/demand ratios. Other things being equal, the greater the ratio of applicants to openings, the greater the competition has been for work within that occupational category. To put these ratios into context, the reader must remember that not only do job seekers and employers in general find jobs or recruit workers through other means, but those interested in certain kinds of jobs are particularly unlikely to use the J.S. For example, workers seeking professional and Managerial jobs are least likely to use the J.S., whereas employers usually recruit construction workers through union halls and hire teachers directly. Thus, the main value of Table 3 is that it reflects, for broad occupational groups, the relative labor market conditions that those using the J.S. encountered when seeking work.

**Table 3. Experienced Supply/Job Openings Demand<sup>1/</sup>**

| Occupation          | Applicants (Supply)<br>May, 1984 | Job Openings (Demand)<br>May, 1984 | Supply/Demand Ratio |           |
|---------------------|----------------------------------|------------------------------------|---------------------|-----------|
|                     |                                  |                                    | May, 1984           | May, 1983 |
| Total               | 109897                           | 13620                              | 8.1                 | 19.5      |
| Prof., Tech., Mgr.  | 13119                            | 1598                               | 8.2                 | 25.4      |
| Clerical            | 18082                            | 2373                               | 7.6                 | 15.5      |
| Sales               | 4848                             | 1829                               | 2.7                 | 5.8       |
| Dom. Services       | 1725                             | 176                                | 9.8                 | 14.3      |
| Other Services      | 16276                            | 3075                               | 5.3                 | 14.5      |
| Farm., Fish., For.  | 3498                             | 210                                | 16.7                | 47.9      |
| Processing          | 2532                             | 572                                | 4.4                 | 7.9       |
| Machine Trades      | 7025                             | 816                                | 8.6                 | 58.5      |
| Benchwork           | 7063                             | 915                                | 7.7                 | 39.2      |
| Structural Work     | 16063                            | 865                                | 18.6                | 59.6      |
| Mtr. Frght., Trans. | 4906                             | 431                                | 11.4                | 41.3      |
| Pkg. & Mat. Hndlg.  | 13270                            | 723                                | 18.4                | 16.5      |
| Other               | 1490                             | 37                                 | 40.3                | 46.1      |

<sup>1/</sup> Inexperienced and improperly coded job applicants are not included in this table.



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MINNESOTA DEPARTMENT OF ECONOMIC SECURITY

RESEARCH AND STATISTICAL SERVICES OFFICE

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# Editorial Comment

## A VIEW FROM THE TRENCHES

By R. Pinola

As producers and purveyors of labor market information, we are continually faced with the challenge of providing data to address new and evolving problems. Although we produce and disseminate a vast array of labor market information, new demands place a premium on one's ingenuity in meeting these demands. Not infrequently, we are able to provide reasoned, albeit imperfect, substitutes for the required information by using proxy data from various statistical programs. However, in many cases, no amount of tinkering with different data bases can produce satisfactory results, thus creating frustration on the part of both the producer and consumer of labor market information. This frustration has understandably led to visions of a comprehensive labor market information system that can meet the myriad needs of different user groups.

While much has been said and written about the development of a comprehensive labor market information system, it not only remains an elusive concept but suffers from mistaken notions of what form such a system should take. Too often, it is viewed as comprising an endless "laundry-list" of data stacked in computer files to meet every conceivable user need instead of a system based on a sound theoretical and conceptual foundation and predicated on high standards of statistical reliability. Without an overriding rational structure, our information base has become a hodge-podge of fragmented data systems that have grown, like Topsy, in response to the exigencies, real and fancied, of the times. Despite their serious limitation, they are frequently employed to make inadequate evaluations of labor market problems and to support policies for which they were not designed. Thus, crude and simple nose counts are often used as substitutes for analysis in researching complex labor market phenomena and formulating socio-economic policy because a data base for more rational study does not exist. The problem is not only with the producers who have failed to design and build a conceptually sound and reliable data system, but with users who prostitute the data by using it for unintended purposes. The problem is further compounded when users are not able to specify the type of data that is most relevant for planning and evaluating program effort.

The seriousness of the data problem also stems from the fact that the various data systems often lack a unifying linkage. Because of the absence of such unifying linkages, even experienced and knowledgeable users of labor market information soon become frustrated. A case in point will make this clear. Currently in use to classify occupational employment and unemployment are four classification systems; namely, 1) the Dictionary of Occupational Titles (DOT), 2) the Census Classification of Occupations, 3) the Standard Occupational Classification system, and 4) the Office of Education Classification system. <sup>1/</sup> In addition, we have some hybrids of these systems that are used for collecting information on occupational employment. <sup>2/</sup> As can be appreciated, anyone

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<sup>1/</sup> There is also the International Occupational Classification system that is used infrequently in the United States but extensively employed abroad.

<sup>2/</sup> For example, that which is used to collect occupational staffing patterns by industry under the Occupational Employment Statistics (OES) program. It should be noted that this is being corrected to some degree by the recent adoption of the Standard Occupational Classification System.

attempting to develop reliable occupational demand and supply estimates, even using crude nose counts, becomes quickly frustrated trying to reconcile different data sources. Moreover, often heralded cross-walks that are meant to address the problem provide unsatisfactory linkages between data sets despite much time and effort expended to bring about a reconciliation of different data sources.

Lest readers think that the above-referenced situation is unique, we hasten to add that the problems are pervasive. Consider the matter of the "Dislocated Worker" as defined under the Job Training Partnership Act of 1982 and for which no satisfactory measure of incidence has yet been developed. In fact, because of the confusion that prevails, counts of dislocated workers range anywhere from 50,000 to 2,000,000. Another instance of definitional and measurement problems exists with respect to "High Tech" occupations. There is as yet no acceptable method by which one can make a determination of a "High Tech" occupation without introducing some very heroic and restrictive assumptions; something akin to proving that the moon is made out of blue cheese if one is given sufficient limiting assumptions. Yet we are asked to provide reliable estimates of dislocated workers and "High Tech" occupational employment in the absence of any definitive and feasible criteria which would permit uniform standards of measurement. Instead, we are forced to develop our own, but this may not be in accord with what Wisconsin, or Pennsylvania, or California has adopted, hence leading to more confusion. In the end, comparability is impossible and different data is used to make program evaluations without regard to the consistency of definitions in our conceptual base.

As we noted earlier, our data systems have developed in many cases to meet the exigencies of the times, which tends to give them an emotional coloring and creates problems of rational design because they must be quickly put into place. In the process, we tend to overlook some of the important objectives and criteria that should be considered in determining what data is essential and what is not, and how it can be used for decision making. For starters, it may be important to know how participants in the labor market are faring at different times and places, but it is equally, if not more, important to know why they are faring as they do. In this context, understanding the way in which the labor market functions and allocates resources should be an important consideration in determining the type of data that is needed. Otherwise analyses are likely to be superficial exercises that may lead to misdirected programs and market interventions.

In summary, we are suggesting that more attention should be given to examining the logical structure and linkages in our existing data systems before piling on an endless variety of new data that is of doubtful value for analyzing economic and labor market problems. For lack of a better word, we call it rationalization of data systems. Under this rubric, we would also call for the elimination of much duplication that now exists and is a consternation to many users who wonder which source to believe. Admittedly, developing a more rational labor market information system will involve more funds than simply piling data upon data, much of which rests unused in massive computer files or computer printouts collecting dust in untended and musky closets. In the end, however, funds used for rationalizing the system will most certainly prove cost effective. As Ms. Courtenay Slater, former Chief Economist in the U.S. Department of Commerce, noted at the National Governors' Association statistical conference in March 1983, the budget costs for statistical programs are not the problem, but rather a symptom of a larger problem which is the lack of a systematic approach to the collection, analysis, and development of data.



# Research Summaries

## A COMPARISON OF REGIONAL TRENDS IN EMPLOYMENT AND UNEMPLOYMENT IN MINNESOTA, 1978-1984

By B. Steuerragel

The purpose of this research summary is to compare the industrial structure of various regions of the State of Minnesota and show how fluctuations in the national economy over the past five years have affected each of the regions in terms of employment and unemployment. For this article, the State was divided into eight regions. In order to measure trends in regional employment over the course of both a recessionary and recovery period, wage and salary employment data for firms covered by the Minnesota Employment Services Law was compared for the period from December 1978 to December 1983, the latest month for which the data was available. Unemployment rates for the regions were calculated for three time periods, June 1979, a prerecession period, June 1982, a period near the trough of the recession, and June 1984, the latest month for which data are available and one in which national economic expansion is taking place.

Table 1 shows the percent distribution of total employment by industry category for the State and eight subregions. This distribution is based on 1980 Census estimates of total employment (wage and salary, self-employed, unpaid family workers) by place of residence.

Table 1

1980 Census Distribution of Regional Employment  
by Industry Category

| Industry                                        | Total State | Northwest | North Central | Northeast | Central | Southwest | South Central | Southeast | Met   |
|-------------------------------------------------|-------------|-----------|---------------|-----------|---------|-----------|---------------|-----------|-------|
| Total, All Industries                           | 100.0       | 100.0     | 100.0         | 100.0     | 100.0   | 100.0     | 100.0         | 100.0     | 100.0 |
| Agriculture                                     | 5.8         | 14.0      | 14.0          | 1.9       | 11.0    | 22.5      | 13.1          | 10.3      | 0.9   |
| Mining                                          | 0.8         | 0.1       | 0.7           | 0.0       | 0.1     | 0.2       | 0.2           | 0.1       | 0.1   |
| Manufacturing                                   | 20.2        | 10.0      | 11.2          | 14.2      | 23.6    | 12.6      | 22.0          | 21.4      | 22.9  |
| Nondurable                                      | 7.0         | 3.8       | 5.0           | 1.3       | 6.7     | 6.2       | 10.7          | 8.4       | 7.0   |
| Durable                                         | 13.2        | 6.2       | 6.2           | 13.0      | 16.9    | 6.5       | 11.4          | 13.0      | 16.0  |
| Construction                                    | 8.3         | 5.1       | 6.2           | 6.0       | 8.6     | 5.9       | 5.4           | 5.2       | 4.7   |
| Transportation, Communication, Public Utilities | 6.0         | —         | 6.8           | 7.9       | 6.1     | 5.2       | 4.8           | 5.0       | 7.5   |
| Trade                                           | 21.4        | 12.3      | 21.9          | 21.2      | 21.2    | 21.7      | 22.1          | 19.8      | 22.5  |
| Finance, Insurance                              | 6.0         | 3.6       | 3.4           | 3.6       | 3.3     | 3.8       | 3.6           | 3.3       | 7.5   |
| Real Estate                                     | —           | —         | —             | —         | —       | —         | —             | —         | —     |
| Services                                        | 29.7        | 26.8      | 17.0          | 10.7      | 29.1    | 25.4      | 26.5          | 21.8      | 29.9  |
| Public Administration                           | 4.0         | 2.9       | 4.1           | 5.4       | 2.9     | 2.6       | 2.5           | 2.6       | 3.9   |

1: Include public health and education services.

Source: 1980 Census of Population, Census Bureau, U.S. Department of Commerce

Table 1 gives insight into the uniqueness of the substate regions. The northwest and southwest regions are the most agricultural oriented in terms of employment. Nearly 10 percent of the northeast region's workers were employed in the mining industry in 1980. The Met, south central, and central regions are manufacturing oriented although residents in the south central region are more likely to work in nondurable goods manufacturing industries, such as food processing while manufacturing in the Met and central regions is more durable goods oriented. Interestingly, the most service-oriented economy in the State is not the Met area but the north central region.

Table 2

Changes in Covered Employment by Type of Industry  
and Unemployment Rates, by Minnesota Regions

| Region        | Goods1/<br>Producing | Service2/<br>Producing | Total | Unemployment Rate<br>(Percent) |           |           | Percentage Point Change<br>in Unemployment Rate |                         |                         |
|---------------|----------------------|------------------------|-------|--------------------------------|-----------|-----------|-------------------------------------------------|-------------------------|-------------------------|
|               |                      |                        |       | June 1979                      | June 1982 | June 1984 | June 1979-<br>June 1982                         | June 1982-<br>June 1984 | June 1979-<br>June 1984 |
| Northwest     | -46.3                | -7.3                   | -16.7 | 6.0                            | 9.4       | 9.7       | 3.4                                             | 0.3                     | 3.7                     |
| North Central | -16.5                | 2.0                    | -1.4  | 5.5                            | 9.0       | 8.3       | 3.5                                             | -0.7                    | 2.8                     |
| Northeast     | -48.7                | -5.6                   | -19.7 | 5.8                            | 15.3      | 10.8      | 9.5                                             | -4.5                    | 5.0                     |
| Central       | 5.9                  | 12.0                   | 7.0   | 4.3                            | 8.3       | 6.7       | 4.0                                             | -1.6                    | 2.4                     |
| Southwest     | -15.0                | -0.8                   | -3.0  | 3.4                            | 6.3       | 6.1       | 2.9                                             | -0.2                    | 2.7                     |
| South Central | -11.3                | 3.1                    | -1.7  | 3.4                            | 6.9       | 5.9       | 3.5                                             | -1.0                    | 2.5                     |
| Southeast     | -11.6                | 5.5                    | 0.2   | 4.1                            | 7.0       | 6.3       | 2.9                                             | -0.7                    | 2.2                     |
| Met           | -1.6                 | 8.1                    | 5.4   | 3.5                            | 6.5       | 5.1       | 3.0                                             | -1.4                    | 1.6                     |
| Minnesota     | -9.2                 | 5.7                    | 1.6   | 4.0                            | 7.6       | 6.2       | 3.6                                             | -1.4                    | 2.2                     |

1/ Mining, construction, manufacturing.

2/ Ag., forest., fish., transportation, trade, finance, services, government.

Table 2 shows the impact of the 1980 and 1982 recessions on employment and the unemployment rate in Minnesota's subareas. All areas of the State experienced higher unemployment rates in 1984 than in 1979 in spite of the fact that some areas have seen 1984 employment levels recover and surpass 1978 levels. The areas of the State most adversely affected by the recessions were the northeast, northwest, north central, southwest, and south central. Those areas are similar in that they are either heavily dependent on a single industry which was severely affected by the recession or they have a significant agriculture component in their economic base. Both northeastern and northwestern Minnesota have had net losses in employment and significant net increases in the unemployment rate. In the case of northeastern Minnesota, of course, the iron mining industry experienced severe cutbacks in employment due to slack demand for domestic steel. In the northwestern part of the State, both of the conditions were the case as the area is heavily agricultural and the two major manufacturing industries, wood products and recreational transportation equipment, were hard hit by the recession and unfavorable winter weather which affected consumer demand. In the case of the southwest, south central, and north central regions, there was a net loss of employment, but the magnitude of the change in the unemployment rate was not as significant as in either northeastern or northwestern Minnesota. Part of the reason why the unemployment rates have risen more slowly in the southwestern and south central regions despite their sluggish economy is that their population growth has been slower than in other regions and, consequently, the labor force has grown at the slowest rate of any region in the state between 1979 and 1984. Over the five-year period, the labor force in southwestern and south central Minnesota grew by 4.4 percent and 4.0 percent respectively, compared to a 9.9 percent rate of growth for the State in general.

In contrast to the other regions, employment had recovered from the recession and was expanding in the Met, central, and southeastern regions of the State at the end of 1983. All three of these regions have a strong service sector which weathered the recession and a durable goods manufacturing sector which recovered rapidly following the recession. The central and Metropolitan regions have had the fastest labor force growth in the State over the past five years, 11.4 percent and 14.1 percent, respectively. In spite of this rapid growth in working age population, the unemployment rates have risen slower than in the other regions because of the job-creating strength of the economies in these regions.

# The Job Market

## THE HOTELS, MOTELS, AND OTHER LODGING PLACES INDUSTRY

By B. Jones

Employment in the Hotels, Motels, and Other Lodging Places Industry has shown steady growth over the past 20 years in Minnesota. Wage and salary employment in this industry increased by 225 percent from 1960 to 1983. In this article we will briefly examine the composition, employment, occupational staffing patterns, and future outlook of this industry.

### The Industry

The Hotels, Motels, and Other Lodging Places Industry includes commercial and institutional establishments engaged in furnishing lodging, or lodging and meals, and camping space and facilities, on a fee basis. This industry is divided into four parts: (1) hotels, motels, and tourist courts; (2) rooming and boarding houses; (3) camps and trailering parks; and (4) organization hotels and lodging houses on a membership basis.

There are 1,100 lodging establishments in Minnesota employing 26,500 workers. This industry comprises 1.2 percent of the State's nonagricultural wage and salary employment. About fifty percent of these workers are employed in the Minneapolis-St. Paul nine-county metropolitan area. Employment in this industry grew by 47.7 percent from 1970 to 1978 and is expected to increase another 26 percent from 1978 to 1985.

Approximately 95 percent of the employees in the industry work in hotels, motels, and tourist courts. Roughly 2.6 percent work in camps and trailer parks, and the remaining (2.4 percent) are employed by rooming and boarding houses and organization hotels and lodging houses.

### Occupational Staffing Patterns

Technological changes and electronic gadgetry have had very little effect on the occupational staffing patterns of the Hotels, Motels, and Other Lodging Places Industry over the past decade. Further more, staffing patterns are not expected to change significantly in the near future.

Occupational staffing patterns for this industry, as shown on Table I, indicate that 93.5 percent of the workers fall into three broad occupational categories; namely, service workers; managers, officials, and proprietors; and clerical workers.

Service workers comprise the largest proportion (60 percent) of the workers in this industry. After increasing by 42 percent from 1970 to 1978, the employment of service workers is expected to rise another 33 percent by 1985, with the proportion of service workers remaining fairly constant. The bulk of the service workers are in the following occupations: maids (22.3 percent), waiter/waitresses (13.2 percent), childcare workers (12.7 percent), building, interior cleaners (10.0 percent), lodging housekeeper (6.4 percent), and cooks (5.7 percent).

An upward trend in the proportion of clerical employees is noticeable in Table I. They experienced strong growth during the 1970-78 period (65 percent) and are expected to increase another 31 percent by 1985. The dominate occupations in this field are: counter clerks, except food (52.3 percent); cashiers (14.6 percent); bookkeepers (12.6 percent); receptionists (5.7 percent).

Workers in the remaining six broad occupational categories constitute six and one half percent of the industry's total employment. Among the craft workers, carpenters (29.3 percent), stationary engineers (15.0 percent), bakers (11.3 percent), and heavy equipment mechanics (9.7 percent) are significant.

The number of professional and technical workers is expected to increase at the same rate as total employment for this industry; 48 percent for 1970-78 and 26 percent from 1978 to 1985. The predominate occupations among the professional workers are accountants (31.5 percent), musicians and composers (17.3 percent), recreation workers (16.4 percent) and personnel and labor relations workers (11.8 percent). Laundry and dry cleaning operators account for 47.8 percent of the operative occupations, while parking attendants (20.3 percent) and clothing ironers and pressers (15.6 percent) round out the list of significant occupations in this category.

Sales workers and laborers represent less than one percent of the workers. miscellaneous sales workers (83.9 percent) and advertising agents (16.1 percent) comprise the sales workers. Laborers fall into three occupations gardeners and groundskeepers (55.6 percent), stockhandlers (28.9 percent), and miscellaneous laborers (15.6 percent).

Overall, the employment outlook for this industrial sector should continue to be very good through the 1980's. The greatest number of job opportunities are expected to be for service, managerial, and clerical workers.

TABLE 1.

Occupation Staffing Patterns For Hotels, Motels & Other Lodging Places

| Occupational Groups                | Percent of Industry Employment |      |      |
|------------------------------------|--------------------------------|------|------|
|                                    | 1970                           | 1978 | 1985 |
| Professional, Technical, & Kindred | 1.9                            | 1.9  | 1.9  |
| Managers, Officials, & Proprietors | 14.4                           | 14.0 | 14.0 |
| Sales                              | 0.3                            | 0.3  | 0.3  |
| Clerical                           | 11.7                           | 12.0 | 12.4 |
| Craft & Kindred                    | 1.9                            | 1.8  | 1.2  |
| Operatives                         | 2.2                            | 2.2  | 1.9  |
| Service                            | 67.3                           | 67.5 | 68.0 |
| Laborers except Farm               | 0.3                            | 0.3  | 0.3  |
| Farm Laborers                      | 0.0                            | 0.0  | 0.0  |



# SUPPLY/DEMAND FOR SPECIFIC OCCUPATIONS, JULY, 1984 <sup>1/</sup>

By S. Hamper

## MINNESOTA

Shortage Occupations: commissioned sales workers #, highly skilled clerical workers #, experienced machinists, seasonal farm workers

Surplus Occupations: entry-level managers #, entry-level clerical workers #, construction workers #, factory assemblers #, laborers #

## CENTRAL MINNESOTA

Shortage Occupations: commissioned sales workers #, part-time office clerks, skilled mechanics #, farm workers #, journeyman plumbers

Surplus Occupations: bookkeepers #, cashiers #, construction workers, welders, meat-packing food handlers, warehouse workers, assembly workers #, laborers #

## MINNEAPOLIS-ST. PAUL

Shortage Occupations: highly skilled clerical workers #, experienced machinists, fast food service workers #, janitors

Surplus Occupations: entry level managers #, entry level clerical workers, construction workers, factory assemblers #, laborers #

## NORTHEASTERN MINNESOTA

Shortage Occupations: None

Surplus Occupations: entry-level managers #, teachers #, social workers #, office clerks #, sales clerks #, waiters/waitresses #, maids #, food production workers #, machinists #, welders #, maintenance mechanics #, carpenters #, painters #, bricklayers #, millwrights #, pipefitters #, electricians #, truck drivers #, auto and diesel mechanics #, mining crafts, laborers: construction, general, and mining #

## NORTHWESTERN MINNESOTA

Shortage Occupations: commissioned sales persons #, mechanical engineers and drafters #, experienced, high-tech machinists, live-in companions #

Surplus Occupations: entry-level clerical workers #, construction workers #, assembly workers #, general laborers #

## SOUTHERN MINNESOTA

Shortage Occupations: sales workers, tractor-trailer drivers #, seasonal field workers

Surplus Occupations: clerical office workers #, unskilled construction workers #, unskilled factory workers #

<sup>1/</sup> Shortage occupations are those that are difficult to fill or go unfilled due to the lack of qualified applicants. Surplus occupations are those in which the number of qualified applicants greatly exceeds the number of openings.

# This occupation has been listed as a shortage or surplus occupation in at least two out of the last three quarters of the Review.

### Job Service Applicant Supply and Demand

Table 1 compares Job Service (J.S.) job applicants with the J.S. job openings that existed at the end of the month. These comparisons are expressed as supply/demand ratios. Other things being equal, the greater the ratio of applicants to openings, the greater the competition has been for work within that occupational category. To put these ratios into context, the reader must remember that not only do job seekers and employers in general find jobs or recruit workers through other means, but those interested in certain kinds of jobs are particularly unlikely to use the J.S. For example, workers seeking professional and managerial jobs are least likely to use the J.S., whereas employers usually recruit construction workers through union halls and hire teachers directly. Thus, the main value of Table 1 is that it reflects, for broad occupational groups, the relative labor market conditions that those using the J.S. encountered when seeking work. Readers who desire information on current shortage and surplus conditions for a specific occupation should refer to the Supply/Demand assessments given above.

Table 1. Experienced Supply/Job Openings Demand<sup>1/</sup>

| Occupation          | Applicants<br>(Supply)<br>July, 1984 | Job Openings<br>(Demand)<br>July, 1984 | Supply/Demand Ratio |            |
|---------------------|--------------------------------------|----------------------------------------|---------------------|------------|
|                     |                                      |                                        | July, 1984          | July, 1983 |
| Total               | 280,865                              | 17,945                                 | 15.7                | 10.8       |
| Prof., Tech., Mgr.  | 37,771                               | 1,742                                  | 21.7                | 22.0       |
| Clerical            | 50,536                               | 3,080                                  | 16.4                | 6.4        |
| Sales               | 13,871                               | 2,012                                  | 6.9                 | 2.4        |
| Dom. Services       | 5,043                                | 386                                    | 13.1                | 11.0       |
| Other Services      | 37,912                               | 3,864                                  | 9.8                 | 7.4        |
| Farm., Fish., For.  | 18,465                               | 415                                    | 44.5                | 35.3       |
| Processing          | 6,863                                | 1,060                                  | 6.5                 | 4.4        |
| Machine Trades      | 16,550                               | 1,009                                  | 16.4                | 32.2       |
| Benchwork           | 18,240                               | 881                                    | 20.7                | 30.3       |
| Structural Work     | 34,617                               | 1,117                                  | 31.0                | 37.1       |
| Mtr. Frght., Trans. | 10,395                               | 472                                    | 22.0                | 11.9       |
| Pkg. & Mat. Hndlg.  | 27,891                               | 1,843                                  | 15.1                | 18.2       |
| Other               | 2,711                                | 64                                     | 42.4                | 69.6       |

<sup>1/</sup> Inexperienced and improperly coded job applicants are not included in this table.

# Feature Article

## CHANGES IN THE U.S. POPULATION AND LABOR FORCE, 1970-1980

By S. Hamper and W. Graner\*

In this article we will look at change in the United States with respect to the population, labor force, labor force participation rates (LFPRs), employment, and the unemployment rate by Census region <sup>1/</sup> and gender. Our purpose is not so much a definitive analysis, but rather an illustration of the complexities and dynamic interrelationships that determine labor market conditions. The time period that we chose to use was 1970 to 1980. This enabled us to utilize Census data which were easily obtainable and reliable. (The reader may refer to Tables 1 and 1A which present population and labor force data and the change from 1970-1980). The advantage of a ten year time period is that a decade is long enough to reveal genuine change as opposed to errors of measurement or flukes. A danger in using Census data is the possibility that business cycle fluctuations may produce distortions in the data (e.g. the unemployment rate in 1930 vs. 1940). We were fortunate in this regard in that 1970 and 1980 were similar in terms of the business cycle.

We will first look at the unemployment rate because, like the weather, everyone talks about it, but no one seems able to do much about it. The 1980 unemployment rates in the Census regions ranged from a low of 5.7 percent in the South to a high of 7.6 percent in the North Central region. The Northeast at 6.7 percent was slightly above, while the rate for the West at 6.6 percent was equal to that of the Nation. Over the decade, the U.S. rate climbed from 4.4 percent to 6.6 percent as every Region experienced increased unemployment that ranged from a low of half a percentage point in the West to 3.4 percentage points in the North Central region. When comparing the 1970 to 1980 change in unemployment rates by sex, it is obvious that females had the better of it in the struggle for jobs. While the U.S. female rate went up by 1.4 percentage points, the incidence of male joblessness went up by nearly twice as much, or 2.7 percentage points. This general pattern was also manifested in the regions, particularly the North Central and West. In the North Central region the rate for women rose by 1.9 percentage points while the corresponding increase for men was 4.4 percentage points. In the West the males showed a small upward drift of 0.9 percentage points whereas the measure of unemployment for females actually declined by one-tenth of a point. To summarize, when the total unemployment rate for the U.S. was at a moderate level in 1970, it was quite low for men, and high for women. By 1980, the overall jobless rate had risen to a troublesome level, especially for males, but to a much lesser extent for females. Moreover, the relative distribution of unemployment had shifted geographically from the West to the North Central and Northeast.

To gain another perspective on the changes in labor market conditions we turn to an examination of employment behavior over the 1970-1980 decade. Although employment in the U.S. grew from 76.6 million in 1970 to 97.6 million, or by 27.5 percent, it did not match the increased demand for jobs as evidenced by an

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<sup>1/</sup> It was our intention to utilize Census Divisions for this analysis, but not all of the necessary data was available at this level. Should the reader wish to pursue this matter at more detail, labor force and population data from 1970 and 1980, by State, are provided at the end of this article in Table 2.

\* This article was prepared by Susan Hamper and Wayne Graner of the Research and Statistical Services Office of the Minnesota Department of Economic Security.

Table 1  
POPULATION AND LABOR FORCE DATA, 1970 AND 1980, BY CENSUS REGION  
(In Thousands)

| Census Region | 1970     |             |            |        |             | 1980         |          |             |            |        |
|---------------|----------|-------------|------------|--------|-------------|--------------|----------|-------------|------------|--------|
|               | 16+ Pop. | Labor Force | Employment | Unemp. | Unemp. Rate | L.F.P.* Rate | 16+ Pop. | Labor Force | Employment | Unemp. |
| U.S.          | 141087.3 | 80051.0     | 76553.6    | 3497.5 | 4.4         | 56.7         | 171182.9 | 104531.1    | 97631.1    | 6900.0 |
| Male          | 67235.5  | 49549.2     | 47623.8    | 1925.5 | 3.9         | 73.7         | 81747.1  | 5931.1      | 55958.9    | 3972.2 |
| Female        | 73851.8  | 30501.8     | 28929.8    | 1572.0 | 5.2         | 41.3         | 89435.8  | 44600.0     | 41672.2    | 2927.8 |
| NORTHEAST     | 34730.5  | 20043.6     | 19270.8    | 772.7  | 3.9         | 57.7         | 37845.4  | 22881.1     | 21337.9    | 1543.4 |
| % of Total    | 24.6     | 25.0        | 25.2       | 22.1   |             |              | 22.1     | 21.9        | 21.9       | 22.4   |
| Male          | 16260.4  | 12318.9     | 11890.0    | 428.9  | 3.5         | 75.8         | 17707.2  | 13047.5     | 12169.6    | 878.0  |
| Female        | 18470.1  | 7724.7      | 7380.8     | 343.9  | 4.5         | 41.8         | 20138.2  | 9833.6      | 9168.3     | 665.4  |
| NORTH CENTRAL | 38868.2  | 22602.6     | 21649.5    | 953.1  | 4.2         | 58.2         | 44182.4  | 27534.6     | 25435.0    | 2099.7 |
| % of Total    | 27.5     | 28.2        | 28.3       | 27.3   |             |              | 25.8     | 26.3        | 26.1       | 30.4   |
| Male          | 18530.0  | 14189.2     | 13657.9    | 531.4  | 3.7         | 76.6         | 21089.5  | 15907.7     | 14611.5    | 1296.2 |
| Female        | 20338.2  | 8413.4      | 7991.6     | 421.7  | 5.0         | 41.4         | 23092.9  | 11626.9     | 10823.5    | 803.5  |
| SOUTH         | 43320.5  | 23728.7     | 22797.5    | 931.2  | 3.8         | 54.8         | 56558.4  | 33714.3     | 31809.0    | 1905.1 |
| % of Total    | 30.7     | 29.6        | 29.8       | 26.6   |             |              | 33.0     | 32.3        | 32.6       | 27.6   |
| Male          | 20666.3  | 14524.4     | 14051.8    | 472.6  | 3.3         | 70.3         | 26980.7  | 19184.9     | 18171.4    | 1013.3 |
| Female        | 22654.2  | 9204.3      | 8745.7     | 458.6  | 5.0         | 40.6         | 29577.7  | 14529.4     | 13637.6    | 891.8  |
| WEST          | 24168.0  | 13676.2     | 12835.8    | 840.3  | 6.1         | 56.6         | 32596.3  | 20401.0     | 19049.3    | 1351.6 |
| % of Total    | 17.1     | 17.1        | 16.8       | 24.0   |             |              | 19.0     | 19.5        | 19.5       | 19.6   |
| Male          | 11778.7  | 8516.7      | 8024.1     | 492.6  | 5.8         | 72.3         | 15969.2  | 11791.1     | 11006.4    | 784.5  |
| Female        | 12389.3  | 5159.5      | 4811.7     | 347.7  | 6.7         | 41.6         | 16627.1  | 8609.9      | 8042.9     | 567.1  |

\*LFP Rate = Labor Force Participation Rate

Source: 1970 and 1980 Census, U.S. Department of Commerce, Bureau of the Census



Table 1A POPULATION AND LABOR FORCE DATA, 1970 AND 1980, BY CENSUS REGION

| Census Region | % Change |             |            | Absolute Change |              |               |
|---------------|----------|-------------|------------|-----------------|--------------|---------------|
|               | 16+ Pop. | Labor Force | Employment | Unemp. Rate     | L.F.P.* Rate | Net Migration |
| U.S.          | 21.3     | 30.6        | 27.5       | 2.2             | 4.4          | --            |
| Male          | 21.6     | 21.0        | 17.5       | 2.7             | -0.4         |               |
| Female        | 21.1     | 46.2        | 44.0       | 1.4             | 8.6          |               |
| NORTHEAST     | 9.0      | 14.2        | 10.7       | 2.8             | 2.8          | -2828.0       |
| % of Total    |          |             |            |                 |              |               |
| Male          | 8.9      | 5.9         | 2.4        | 3.2             | -2.1         |               |
| Female        | 9.0      | 27.3        | 24.2       | 2.3             | 7.0          |               |
| NORTH CENTRAL | 13.7     | 21.8        | 17.5       | 3.4             | 4.1          | -2368.0       |
| % of Total    |          |             |            |                 |              |               |
| Male          | 13.8     | 12.1        | 7.0        | 4.4             | -1.2         |               |
| Female        | 13.5     | 38.2        | 35.4       | 1.9             | 8.9          |               |
| SOUTH         | 30.6     | 42.1        | 39.5       | 1.9             | 4.8          | 3593.0        |
| % of Total    |          |             |            |                 |              |               |
| Male          | 30.6     | 32.1        | 29.3       | 2.0             | 0.8          |               |
| Female        | 30.6     | 57.9        | 55.9       | 1.1             | 8.5          |               |
| WEST          | 34.9     | 49.2        | 48.4       | 0.5             | 6.0          | 1601.0        |
| % of Total    |          |             |            |                 |              |               |
| Male          | 35.6     | 38.4        | 37.2       | 0.9             | 1.5          |               |
| Female        | 34.2     | 66.9        | 67.2       | -0.1            | 10.2         |               |

Source: Population and Labor Force data were obtained from the 1970 and 1980 Census of Population. Migration Data were obtained from Geographic Mobility, Current Population Reports, U.S. Department of Commerce, Bureau of the Census, December, 1981.

increase in the labor force and the escalation in the unemployment rate over the ten year period. Within the regions, employment growth was very poor in the Northeast (10.7 percent), and well below the U.S. pace in the North Central region (17.5 percent). Meanwhile, the West and South exhibited much more favorable growth in employment, posting gains of 48.4 and 39.5 percent, respectively over the decade. Although the steady rise in female labor force participation rates generated a substantial expansion in the labor force across the country, the disproportionate gain in jobs in the South and West enabled these regions to experience only nominal increases in unemployment rates from 1970 to 1980 in contrast to rapidly increasing rates in the North Central and Northeast regions. At the national level, while male employment was up by only 17.5 percent, job gains by females rose by a whopping 44.0 percent. This type of male/female differential was present in all four major regions of the country. Moreover, whereas the female employment growth in the Northeast (24.2 percent) and North Central (35.4 percent) was fairly substantial, it paled in comparison with the gains in the South (55.9 percent) and West (67.2 percent). In terms of employment behavior, the West and South were considerably more favored by national economic growth than the North and North Central regions.

In general, economic logic tells us that people will tend to migrate to areas of more favorable employment opportunities. In this respect, we would expect a geographic shift in the distribution of the population, particularly of working age, in accord with relative gains in employment. Between 1970 and 1980 such a shift took place with significantly different regional growth patterns. For the entire U.S., the population 16 years of age and over increased by 21.3 percent over the decade. However, population in the Northeast and North Central Regions of the country grew much more slowly, exhibiting only 9.0 and 13.7 percent increases, respectively. On the other hand, significant growth occurred in the South and West, where the population 16 years of age and over grew by 30.6 percent and 34.9 percent, respectively. As a result, between 1970 and 1980 the Northern and Southwest regions reversed their majority position in terms of the working age population. Thus, although the Northern regions contained 52.2 percent of the total U.S. population 16 years of age and over in 1970, by 1980 this proportion had shrunk to 47.9 percent. This phenomenon is not necessarily a function of differences in birth and death rates, as Table 1a illustrates, since data on migration patterns indicate a substantial population movement out of the Northeast and North Central regions to the South and West. Looking at the female/male distribution of the population, one becomes cognizant of the fact that females comprised a larger proportion of the working age population, in 1980, 52.2 percent compared to 47.8 percent for males. While women outnumber men due to several factors, including higher male infant mortality rates, higher male death rates at other ages, and greater overall increases in life expectancy for females, the higher survival rates for women had no effect on the geographical shift in the working age population. This conclusion can be deduced from the fact that there is virtually no difference in the proportion of males to females among the Census regions, nor has there been any appreciable change in the proportion of males to females from 1970 to 1980 in the U.S. or in any region.

Looking at labor force growth, not surprisingly, changes in the labor force follow the same geographic patterns as changes in the population. As was true for the working age population, the increases in the labor force from 1970 to 1980 were significantly less than the national change in the Northeast and North Central regions, and much greater than the U.S. change in the South and West regions. In 1970 the Northern regions accounted for over half of the total U.S. labor force, 53.3 percent, while the South and West accounted for 46.7 percent.

By 1980 the South and West regions contained over half of the labor force (51.8 percent). Changes in labor force participation rates <sup>2/</sup> (LFPR) closely approximate the change patterns in the labor force. In addition to the regional changes in the labor force participation rates, there have been some significant developments in differences in the rate for males and females. Nationally, the LFPR increased overall from 1970 to 1980 by 4.4 percentage points. However, during this same time period, the male LFPR actually decreased slightly while the female rate increased substantially. Nationally, the male LFPR has been declining since the early 1950's, largely due to the labor force withdrawal of older men. The increase in the rate for women has accompanied a tremendous expansion in employment in the services sector where women have obtained the majority of new jobs. They have also enjoyed favorable employment opportunities in light manufacturing such as found in electronic goods and small appliances assembly. Other things considered, it seems that demand has induced as strong if not stronger supply response than some of the sociological factors that have often been cited as promoting high female labor force participation rates. In the absence of employment growth it is unlikely that female labor force participation rates would have risen as dramatically as evidenced by historical trends. Female LFPRs increased in all regions from 1970 to 1980, while the male LFPR decreased in the Northeast and North Central regions, and increased only slightly in the South and West regions.

Summarizing the labor force trends from 1970 to 1980, two patterns emerge as apparent from our brief analysis. First was the regional shift in employment and the working age population, from the Northern states to the South and West. Secondly, there was a dramatic increase in the involvement of females in the labor force brought about by very favorable labor market conditions for occupations in which women predominate.

Despite the significant increases in the female labor force, their unemployment rates did not rise as fast over the decade as those for males. This over-the-decade experience illustrates the direct connection between labor force and employment behavior on the unemployment rate. Thus, unemployment rates in the Northern tier regions rose substantially faster than in the South and West even though the working age population and the labor force grew much more slowly in the North than in the South and West. This points out the strong influence of employment behavior on the unemployment rate.

However, it should be noted that the unemployment count is not only affected by the number of persons employed at a given time, but by the decisions that people make to enter the labor market and actively seek work. These decisions are conditioned by many factors, both economic and noneconomic. For example, a persons's decision to seek employment may be greatly influenced by his/her perception of whether or not the labor market is conducive to his/her successfully obtaining a job. Moreover, the number of persons seeking employment in a particular area is affected by the growth and composition of the population and its geographic mobility. <sup>3/</sup>

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<sup>2/</sup> Labor force participation rate =  $\frac{\text{labor force}}{\text{population 16 years and over}} \times 100$

<sup>3/</sup> For example, It can be shown that one area may experience an increase in the unemployment rate in the face of increasing employment while another will exhibit little or no increase in unemployment despite no increase or even a decline in employment. Therefore, unemployment rates may not always provide a good measure of labor market conditions, particularly for comparisons between two geographic areas.

In short, our analysis indicates that the labor markets of the South and West were better able to absorb the increases in their working age populations and labor forces. Even though the increase in the population 16 years of age and over, together with LFPR growth, was much greater in the South and West from 1970-1980, their unemployment rates increased less than in the North. The same pattern holds true for females. The female LFPR increased significantly from 1970-1980, while the male LFPR actually decreased, yet females experienced much higher growth in employment and a substantially lower increase in their unemployment rate than did males. Germane to this issue, but beyond the time and space constraints of this article, would be an analysis of the industrial and occupational structure of the geographic and gender labor markets and the relationship of those two variables to the trends in the components of the labor force.



Table 2

POPULATION AND LABOR FORCE DATA, 1970 AND 1980, BY STATE  
(In Thousands)

|      | 1970     |             |            |             | 1980         |          |             |            |             |              |      |      |
|------|----------|-------------|------------|-------------|--------------|----------|-------------|------------|-------------|--------------|------|------|
|      | 16+ Pop. | Labor Force | Employment | Unemp. Rate | L.F.P.* Rate | 16+ Pop. | Labor Force | Employment | Unemp. Rate | L.F.P.* Rate |      |      |
| U.S. | 141087.3 | 80051.0     | 76553.6    | 3497.5      | 4.4          | 56.7     | 171182.9    | 104531.1   | 97631.1     | 6900.0       | 6.6  | 61.1 |
| AL   | 2347.2   | 1249.2      | 1193.3     | 55.9        | 4.5          | 53.2     | 2880.3      | 1650.3     | 1522.5      | 127.8        | 7.7  | 57.3 |
| AK   | 191.1    | 98.3        | 89.2       | 9.1         | 9.3          | 51.4     | 286.4       | 183.9      | 166.4       | 17.5         | 9.5  | 64.2 |
| AZ   | 1194.6   | 641.0       | 614.1      | 26.9        | 4.2          | 53.7     | 2024.4      | 1184.9     | 1116.2      | 68.6         | 5.8  | 58.5 |
| AR   | 1340.6   | 688.6       | 649.7      | 38.9        | 5.6          | 51.4     | 1702.9      | 946.4      | 882.0       | 64.4         | 6.8  | 55.6 |
| CA   | 14042.7  | 7992.2      | 7484.7     | 507.5       | 6.3          | 56.9     | 18115.7     | 11387.9    | 10637.4     | 750.1        | 6.6  | 62.9 |
| CO   | 1515.8   | 862.1       | 825.8      | 36.4        | 4.2          | 56.9     | 2181.6      | 1443.0     | 1371.7      | 71.3         | 4.9  | 66.1 |
| CT   | 2117.5   | 1298.5      | 1253.0     | 45.5        | 3.5          | 61.3     | 2401.4      | 1555.2     | 1479.4      | 75.8         | 4.9  | 64.8 |
| DE   | 371.9    | 219.2       | 210.9      | 8.2         | 3.7          | 58.9     | 450.7       | 280.5      | 262.1       | 18.4         | 6.6  | 62.2 |
| DC   | 555.0    | 348.1       | 335.0      | 13.1        | 3.8          | 62.7     | 515.4       | 321.7      | 300.9       | 20.8         | 6.5  | 62.4 |
| FL   | 4907.2   | 2521.2      | 2426.3     | 95.0        | 3.8          | 51.4     | 7710.7      | 4256.5     | 4046.1      | 210.5        | 4.9  | 55.2 |
| GA   | 3119.0   | 1805.0      | 1746.8     | 58.2        | 3.2          | 57.9     | 4027.4      | 2483.7     | 2344.4      | 139.3        | 5.6  | 61.7 |
| HI   | 522.0    | 294.5       | 285.6      | 8.9         | 3.0          | 56.4     | 722.6       | 437.2      | 417.4       | 19.7         | 4.5  | 60.5 |
| ID   | 479.5    | 271.6       | 257.5      | 14.1        | 5.2          | 56.6     | 671.9       | 412.7      | 380.1       | 32.7         | 7.9  | 61.4 |
| IL   | 7717.0   | 4591.6      | 4419.9     | 171.7       | 3.7          | 59.5     | 8611.6      | 5399.3     | 4994.0      | 405.3        | 7.5  | 62.7 |
| IN   | 3551.4   | 2103.4      | 2016.4     | 87.1        | 4.1          | 59.2     | 4085.3      | 2569.5     | 2366.8      | 202.7        | 7.9  | 62.9 |
| IA   | 1957.6   | 1127.4      | 1088.3     | 39.1        | 3.5          | 57.6     | 2196.7      | 1384.2     | 1311.9      | 72.3         | 5.2  | 63.0 |
| KS   | 1583.9   | 886.6       | 852.3      | 34.3        | 3.9          | 56.0     | 1800.3      | 1111.9     | 1066.9      | 45.0         | 4.0  | 61.8 |
| KY   | 2227.4   | 1141.6      | 1088.8     | 52.8        | 4.6          | 51.3     | 2721.0      | 1503.7     | 1369.4      | 134.2        | 8.9  | 55.3 |
| LA   | 2398.9   | 1224.2      | 1158.2     | 65.9        | 5.4          | 51.0     | 3046.0      | 1746.5     | 1644.7      | 101.8        | 5.8  | 57.3 |
| ME   | 685.9    | 381.7       | 365.8      | 15.9        | 4.2          | 55.6     | 846.2       | 498.5      | 459.8       | 38.7         | 7.8  | 58.9 |
| MD   | 2683.6   | 1590.1      | 1538.8     | 51.3        | 3.2          | 59.3     | 3215.5      | 2072.3     | 1952.6      | 119.6        | 5.8  | 64.4 |
| MA   | 4009.0   | 2389.4      | 2298.2     | 91.2        | 3.8          | 59.6     | 4463.5      | 2811.5     | 2676.2      | 135.3        | 4.8  | 63.0 |
| MI   | 5971.8   | 3455.3      | 3252.8     | 202.5       | 5.9          | 57.9     | 6877.3      | 4181.9     | 3696.6      | 485.3        | 11.6 | 60.8 |
| MN   | 2572.3   | 1528.4      | 1464.3     | 64.2        | 4.2          | 59.4     | 3061.3      | 2005.6     | 1895.2      | 110.4        | 5.5  | 65.5 |
| MS   | 1463.1   | 756.5       | 718.9      | 37.5        | 5.0          | 51.7     | 1809.4      | 1020.0     | 946.9       | 73.1         | 7.2  | 56.4 |
| MO   | 3292.1   | 1845.4      | 1767.3     | 78.1        | 4.2          | 56.1     | 3738.9      | 2278.6     | 2123.7      | 154.9        | 6.8  | 60.9 |
| MT   | 470.8    | 260.6       | 244.6      | 16.0        | 6.1          | 55.4     | 585.6       | 360.8      | 329.4       | 31.4         | 8.7  | 61.6 |
| NE   | 1031.4   | 592.1       | 576.1      | 16.1        | 2.7          | 57.4     | 1182.3      | 747.0      | 720.2       | 26.8         | 3.6  | 63.2 |
| NV   | 335.0    | 209.0       | 197.8      | 11.2        | 5.4          | 62.4     | 613.7       | 425.8      | 399.4       | 26.4         | 6.2  | 69.4 |
| NH   | 509.1    | 304.7       | 294.1      | 10.6        | 3.5          | 59.9     | 696.8       | 455.0      | 434.0       | 21.4         | 4.7  | 65.3 |
| NJ   | 5035.4   | 2972.6      | 2859.0     | 113.6       | 3.8          | 59.0     | 5643.6      | 3515.2     | 3274.2      | 240.9        | 6.9  | 62.3 |
| NM   | 652.4    | 342.5       | 322.8      | 19.6        | 5.7          | 52.5     | 938.1       | 550.1      | 511.0       | 39.1         | 7.1  | 58.6 |
| NY   | 13010.5  | 7421.6      | 7124.0     | 297.6       | 4.0          | 57.0     | 13509.4     | 7975.2     | 7411.5      | 563.7        | 7.1  | 59.0 |
| NC   | 3519.5   | 2054.8      | 1984.4     | 70.4        | 3.4          | 58.4     | 4441.8      | 2783.0     | 2626.8      | 156.2        | 5.6  | 62.7 |
| ND   | 417.0    | 214.3       | 204.6      | 9.8         | 4.6          | 51.4     | 486.8       | 290.5      | 274.4       | 16.2         | 5.6  | 59.7 |
| OH   | 7318.0   | 4234.5      | 4063.8     | 170.7       | 4.0          | 57.9     | 8107.0      | 4988.6     | 4575.4      | 413.2        | 8.3  | 61.5 |
| OK   | 1817.6   | 968.4       | 928.0      | 40.4        | 4.2          | 53.3     | 2277.7      | 1337.6     | 1278.5      | 59.0         | 4.4  | 58.7 |

\*L.F.P. Rate denotes Labor Force Participation Rate.

Table 2

|    | 1970     |             |            |        |             | 1980        |          |             |            |             |
|----|----------|-------------|------------|--------|-------------|-------------|----------|-------------|------------|-------------|
|    | 16+ Pop. | Labor Force | Employment | Unemp. | Unemp. Rate | L.F.P. Rate | 16+ Pop. | Labor Force | Employment | Unemp. Rate |
| OR | 1477.4   | 837.1       | 778.7      | 58.3   | 7.0         | 56.7        | 2002.1   | 1238.5      | 1133.1     | 8.5         |
| PA | 8379.1   | 4712.3      | 4536.9     | 175.4  | 3.7         | 56.2        | 9161.6   | 5366.1      | 4947.4     | 7.8         |
| RI | 680.1    | 388.0       | 372.3      | 15.7   | 4.0         | 57.1        | 737.3    | 461.2       | 427.5      | 7.3         |
| SC | 1742.0   | 991.8       | 954.6      | 37.3   | 3.8         | 56.9        | 2302.8   | 1419.9      | 1331.3     | 6.2         |
| SD | 452.1    | 249.4       | 240.1      | 9.3    | 3.7         | 55.2        | 512.9    | 314.2       | 297.4      | 5.3         |
| TN | 2742.4   | 1526.1      | 1458.4     | 67.6   | 4.4         | 55.6        | 3464.5   | 2060.8      | 1907.8     | 7.4         |
| TX | 7624.5   | 4297.8      | 4141.5     | 156.3  | 3.6         | 56.4        | 10466.8  | 6614.1      | 6358.5     | 3.9         |
| UT | 681.3    | 399.2       | 378.6      | 20.6   | 5.2         | 58.6        | 974.2    | 617.7       | 584.1      | 5.4         |
| VT | 303.9    | 174.8       | 167.6      | 7.2    | 4.1         | 57.5        | 385.6    | 243.2       | 227.9      | 6.3         |
| VA | 3229.4   | 1766.7      | 1714.2     | 52.5   | 3.0         | 54.7        | 4065.0   | 2462.2      | 2345.5     | 4.7         |
| WA | 2379.6   | 1338.5      | 1233.1     | 105.4  | 7.9         | 56.2        | 3139.7   | 1933.4      | 1787.2     | 7.6         |
| WV | 1231.3   | 579.3       | 549.6      | 29.7   | 5.1         | 47.0        | 1460.5   | 755.1       | 689.0      | 8.8         |
| WI | 3003.4   | 1774.0      | 1703.6     | 70.4   | 4.0         | 59.1        | 3522.0   | 2263.3      | 2112.5     | 6.7         |
| WY | 225.8    | 129.6       | 123.4      | 6.2    | 4.8         | 57.4        | 340.3    | 225.1       | 215.5      | 4.3         |

Source: 1970 and 1980 Census of Population, U.S. Department of Commerce, Bureau of the Census

# Brief Analysis Of Economic Conditions

## THE NATIONAL AND STATE ECONOMICS AT MIDYEAR

By B. Boyle

### Nation

According to a majority of the indicators of current economic health, the Nation's economy was still growing at a brisk pace in July. However, other barometers, including the index of leading indicators, suggested that the economy may be slowing down.

Although the seasonally adjusted unemployment rate rose 0.4 of a percentage point to 7.5 percent in July and adjusted total employment fell by 350,000 in July, seasonally adjusted nonfarm payroll employment rose a satisfactory 302,000 in July. The erratic behavior of the unemployment rate and total employment in June and July was probably due to problems in the seasonal adjustment process which often occur in June and July because of year to year variations in the number of summer jobseekers. Meanwhile, the July rise in payroll employment was still considered a healthy gain by economists and was not too far below the average monthly rise of 342,000 during the first half of the year. Employment in manufacturing picked up in July, climbing by 105,000 after average monthly increases of 83,000 during the previous six months.

Other economic reports for July showed some contrasting developments. Retail sales and housing starts declined while industrial production and personal income rose substantially. Except for May, production and income have been quite strong and sales have not fallen since March. A second monthly decline in the index of leading indicators in July was the strongest evidence of some slowing in the growth of the economy.

### State

Although the unemployment rate rose for the second consecutive month in July and total employment fell slightly in July, a solid gain in nonfarm payroll employment in July indicated that the State's economy was still quite strong. Economists in the State disagree on whether or not the Minnesota economy is slowing down.

Minnesota's seasonally adjusted unemployment rate rose 0.2 of a percentage point for the second straight month in July, climbing to 6.4 percent after averages of 6.1 percent in the second quarter and 6.3 percent in the first quarter. However, Department analysts believe that the May to July increase in the rate was somewhat overstated due to adjustments required by Federal regulations. Seasonally adjusted total employment dipped by 500 in July after gains of 28,300 in the second quarter and 41,500 in the first quarter. Meanwhile, nonfarm payroll employment, also seasonally adjusted, rose by a healthy 10,800 in July after a strike retarded growth by only 4,800 in June. July's increase in payroll employment was quite close to the average monthly gain between January and May. Nearly nine-tenths of the July advance in payroll jobs occurred in the trade and services industry divisions. Over-the-year and during the upturn, the largest employment increases were in the trade, manufacturing, and services sectors.

Other indicators for July and the second quarter suggested that the Minnesota economy might be slowing down. Seasonally adjusted private housing permits fell in both the second quarter and July while seasonally average weekly initial claims for unemployment benefits rose significantly in July.

# Forecasts

## FORECASTS OF GNP AND MINNESOTA PAYROLL EMPLOYMENT

By C. Cline

Actual values for the second quarter of 1984 and forecasted values for the next eight quarters of the real Gross National Product and of total and major industry employment are given below. As usual these incorporate revisions in second quarter values. In addition, Bureau of Economic Analysis revisions in real GNP starting with the first quarter of 1981 were also incorporated into the data set.

Percent errors in the one period ahead forecasts for the second quarter are -0.69%; -0.22%; +3.76%; -4.90%; -0.62%; -1.24%; -0.60%; -0.50%; +0.53% and +0.20% respectively from real GNP through total Nonagricultural Wage and Salary to Government employment. These errors are consistent with our average errors. When negative, the errors reflect that most of our forecasts were generally below the actual values. That is, the national and state economies have done better than we (and others) expected. Our forecasts show moderating growth in real GNP and total Minnesota employment. The actual change in employment from 1983-2 through 1984-2 was +6.25%; that forecast for 1984-2 through 1985-2 and for 1985-2 through 1986-2 are +5.17% and +3.10% respectively. Similar values for real GNP are +7.71%, +3.43%, and 2.84% percent.

| Quarter          | Real GNP (Billions of 1972 Dollars) | MINNESOTA PAYROLL EMPLOYMENT, BY QUARTER<br>(In Thousands) |        |                       |               |                                                    |                            |                                   |          |            |
|------------------|-------------------------------------|------------------------------------------------------------|--------|-----------------------|---------------|----------------------------------------------------|----------------------------|-----------------------------------|----------|------------|
|                  |                                     | Total Nonagricultural Wage & Salary                        | Mining | Contract Construction | Manufacturing | Transportation, Communications, & Public Utilities | Retail and Wholesale Trade | Finance, Insurance, & Real Estate | Services | Government |
| <u>Current</u>   |                                     |                                                            |        |                       |               |                                                    |                            |                                   |          |            |
| 1984-II          | 1640.80                             | 1808.70                                                    | 10.65  | 68.52                 | 364.68        | 96.11                                              | 452.25                     | 105.42                            | 411.78   | 299.29     |
| <u>FORECASTS</u> |                                     |                                                            |        |                       |               |                                                    |                            |                                   |          |            |
| 1984-III         | 1660.10                             | 1842.43                                                    | 10.68  | 80.22                 | 385.05        | 97.01                                              | 457.65                     | 107.25                            | 417.35   | 277.68     |
| 1984-IV          | 1674.77                             | 1872.63                                                    | 10.17  | 74.53                 | 381.42        | 100.08                                             | 465.24                     | 107.20                            | 423.32   | 301.24     |
| 1985-I           | 1687.23                             | 1829.85                                                    | 9.87   | 55.98                 | 376.73        | 97.47                                              | 452.56                     | 107.55                            | 421.38   | 303.81     |
| 1985-II          | 1697.13                             | 1902.26                                                    | 11.27  | 70.90                 | 384.36        | 100.09                                             | 474.23                     | 110.12                            | 436.88   | 306.29     |
| 1985-III         | 1708.30                             | 1928.09                                                    | 11.46  | 82.56                 | 400.68        | 100.50                                             | 477.25                     | 111.93                            | 441.20   | 235.53     |
| 1985-IV          | 1720.57                             | 1947.03                                                    | 10.85  | 76.07                 | 392.22        | 102.81                                             | 483.96                     | 111.66                            | 447.46   | 307.16     |
| 1986-I           | 1732.48                             | 1891.81                                                    | 10.31  | 56.51                 | 384.10        | 99.61                                              | 469.48                     | 111.76                            | 444.58   | 308.90     |
| 1986-II          | 1745.31                             | 1961.24                                                    | 11.59  | 71.48                 | 389.89        | 102.24                                             | 489.76                     | 114.28                            | 461.47   | 310.51     |

### Notes

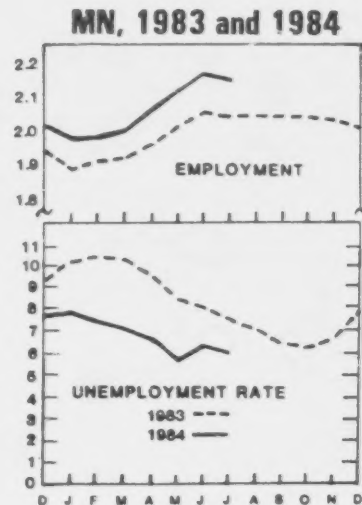
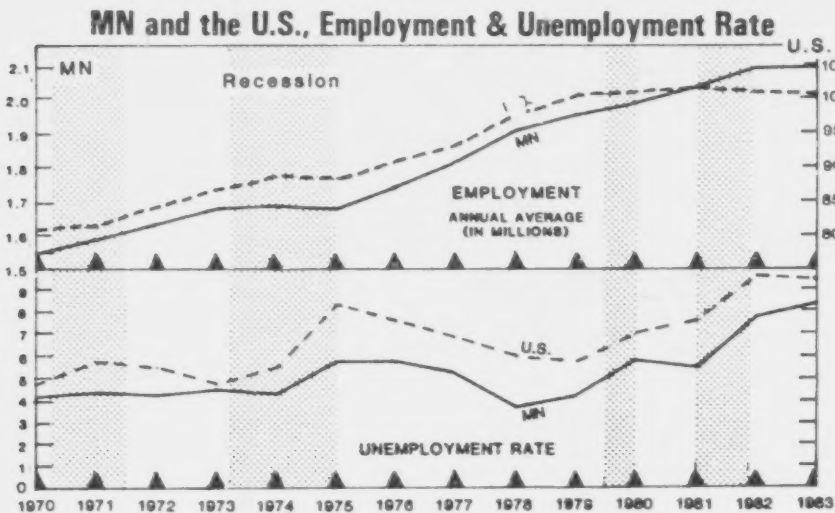
1. These forecasts are produced using the Vector Autoregression model developed for Research by Rao Aiyagari.
2. The concept of employment forecasted is that of Nonagricultural Wage and Salary employment. The count represents the number of jobs held since the data is generated from a survey of employer payroll records. Groups included in labor force employment, but excluded here are the self employed, domestics, unpaid family workers, employees of nonprofit institutions, and those government workers not covered by unemployment insurance.
3. Employment forecasts are seasonally unadjusted values. Real GNP is seasonally adjusted.
4. Forecasts of major industry employment do not sum to the forecast of total wage and salary employment. This is due to random error in the forecasted values.
5. There is great diversity in the accuracy of our forecasts among the major industry division. More information on their accuracy can be obtained from the author on request.



# Labor Force Statistics

| Labor Force Estimates | MINNESOTA<br>(Numbers in '000's) |             |          | UNITED STATES<br>(Numbers in '000,000's) |             |          |
|-----------------------|----------------------------------|-------------|----------|------------------------------------------|-------------|----------|
|                       | July<br>1984                     | Change From |          | July<br>1984                             | Change From |          |
|                       |                                  | Last Mo.    | Year Ago |                                          | Last Mo.    | Year Ago |
| Civilian Labor Force  | 2290.3                           | -25.0       | 80.5     | 116.2                                    | 0.8         | 2.2      |
| Employed              | 2152.9                           | -19.4       | 108.1    | 107.5                                    | 0.7         | 4.2      |
| Unemployed            | 137.4                            | -5.6        | -27.6    | 8.7                                      | 0.1         | -2.0     |
| Unemployment Rate     |                                  |             |          |                                          |             |          |
| Actual                | 6.0                              | -0.2        | -1.5     | 7.5                                      | 0.1         | -1.9     |
| Seasonally Adjusted   | 6.4                              | 0.2         | -1.6     | 7.5                                      | 0.4         | -2.0     |

| Historical Labor Force Series |                                         |            |              |      |                                                 |            |              |      |
|-------------------------------|-----------------------------------------|------------|--------------|------|-------------------------------------------------|------------|--------------|------|
| Year                          | Minnesota<br>(Annual Average in '000's) |            |              |      | United States<br>(Annual Average in '000,000's) |            |              |      |
|                               | Labor Force                             | Employment | Unemployment |      | Labor Force                                     | Employment | Unemployment |      |
|                               |                                         |            | Number       | Rate |                                                 |            | Number       | Rate |
| 1970                          | 1625.0                                  | 1557.0     | 68.0         | 4.2  | 82.8                                            | 78.7       | 4.1          | 4.9  |
| 1971                          | 1665.0                                  | 1593.0     | 73.0         | 4.4  | 84.4                                            | 79.4       | 5.0          | 5.9  |
| 1972                          | 1709.0                                  | 1635.0     | 73.0         | 4.3  | 87.0                                            | 82.2       | 4.9          | 5.6  |
| 1973                          | 1774.0                                  | 1694.0     | 80.0         | 4.5  | 89.4                                            | 85.1       | 4.4          | 4.9  |
| 1974                          | 1779.0                                  | 1701.0     | 77.0         | 4.3  | 91.9                                            | 86.8       | 5.2          | 5.6  |
| 1975                          | 1804.0                                  | 1697.0     | 107.0        | 5.9  | 93.8                                            | 85.8       | 7.9          | 8.5  |
| 1976                          | 1849.0                                  | 1739.0     | 109.0        | 5.9  | 96.2                                            | 88.8       | 7.4          | 7.7  |
| 1977                          | 1907.0                                  | 1809.0     | 97.0         | 5.1  | 99.0                                            | 92.0       | 7.0          | 7.1  |
| 1978                          | 1979.0                                  | 1903.0     | 75.0         | 3.8  | 102.3                                           | 96.0       | 6.2          | 6.1  |
| 1979                          | 2038.0                                  | 1953.0     | 85.0         | 4.2  | 105.0                                           | 98.8       | 6.1          | 5.8  |
| 1980                          | 2109.0                                  | 1984.0     | 125.0        | 5.9  | 106.9                                           | 99.3       | 7.6          | 7.1  |
| 1981                          | 2153.0                                  | 2034.0     | 119.0        | 5.5  | 108.7                                           | 100.4      | 8.3          | 7.6  |
| 1982                          | 2166.0                                  | 1996.0     | 169.0        | 7.8  | 110.2                                           | 99.5       | 10.7         | 9.7  |
| 1983                          | 2174.0                                  | 1997.0     | 178.0        | 8.2  | 111.5                                           | 100.8      | 10.7         | 9.6  |



# Labor Market Conditions

The table and graphs in this section describe the behavior of the market for labor services in terms of its quantity, price, and supply. The quantity of labor services, which is the number of employed persons, is classified by industry. The price of labor services is roughly indicated by the industry wage.

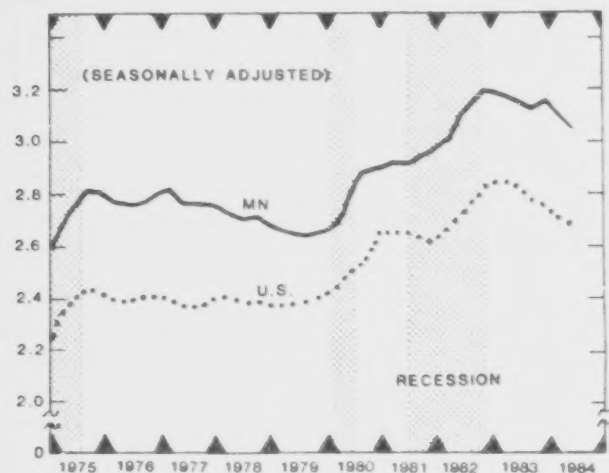
Unemployment estimates provide a qualified measure of excess labor supply. The degree to which persons participate in the labor market and the effectiveness of the market in utilizing labor services are indicated by Labor Force Estimates and by Other Rates of Labor Utilization.

| Labor Force<br>And Establishment Data              | MINNESOTA<br>(Numbers in '000's)                                          |                        |          | UNITED STATES<br>(Numbers in '000's) |                        |          |
|----------------------------------------------------|---------------------------------------------------------------------------|------------------------|----------|--------------------------------------|------------------------|----------|
|                                                    | II Qtr.<br>1984                                                           | Percent Change<br>From |          | II Qtr.<br>1984                      | Percent Change<br>From |          |
|                                                    |                                                                           | Last Qtr               | Year Ago |                                      | Last Qtr               | Year Ago |
| <u>LABOR FORCE ESTIMATES</u>                       |                                                                           |                        |          |                                      |                        |          |
| Total Labor Force                                  | 2264.7                                                                    | 5.1                    | 2.9      | 113599                               | 2.0                    | 2.2      |
| Employment                                         | 2124.5                                                                    | 6.5                    | 5.5      | 105179                               | 3.1                    | 5.1      |
| Nonagricultural                                    | n.a.                                                                      | n.a.                   | n.a.     | 101645                               | 2.5                    | 5.3      |
| Agricultural                                       | n.a.                                                                      | n.a.                   | n.a.     | 3533                                 | 24.2                   | -0.7     |
| Unemployment                                       | 140.2                                                                     | -12.1                  | -25.6    | 8420                                 | -10.5                  | -24.3    |
| By Reason - New Reentrants-%*                      | n.a.                                                                      | n.a.                   | n.a.     | 39.3                                 | 4.0                    | 18.0     |
| By Reason - Quit-%*                                | n.a.                                                                      | n.a.                   | n.a.     | 9.4                                  | 6.8                    | 30.6     |
| By Reason - Lost-%*                                | n.a.                                                                      | n.a.                   | n.a.     | 51.4                                 | -3.7                   | -13.6    |
| Unemployment Rates                                 |                                                                           |                        |          |                                      |                        |          |
| Actual                                             | 6.2                                                                       | -16.2                  | -27.9    | 7.4                                  | -11.9                  | -26.0    |
| Seasonally Adjusted                                | 6.1                                                                       | -3.2                   | -28.2    | 7.5                                  | -5.1                   | -25.7    |
| <u>OTHER RATES OF LABOR UTILIZATION</u>            |                                                                           |                        |          |                                      |                        |          |
| Participation Rt (Labor Force/Population 16+)      | n.a.                                                                      | n.a.                   | n.a.     | 64.5                                 | 0.6                    | 0.8      |
| Full Employment Deficit - Percent of Workers1/     | 2.2                                                                       | 3.4                    | 4.6      | 3.4                                  | 4.4                    | 6.0      |
| Manpower Utilization Rate2/                        | 84.4                                                                      | 0.7                    | 3.2      | 83.1                                 | 0.6                    | 4.0      |
| <u>NONAGRICULTURAL WAGE AND SALARIED POSITIONS</u> |                                                                           |                        |          |                                      |                        |          |
| Employment*                                        | 1798.8                                                                    | 1.9                    | 5.5      | 93728                                | 1.0                    | 4.6      |
| Mining                                             | 10.0                                                                      | 7.5                    | 11.1     | 991                                  | 1.4                    | 5.3      |
| Construction                                       | 69.3                                                                      | 7.8                    | 17.1     | 4299                                 | 2.9                    | 11.4     |
| Manufacturing                                      | 366.2                                                                     | 2.5                    | 6.7      | 19576                                | 1.1                    | 7.0      |
| Durables                                           | 220.3                                                                     | 3.4                    | 8.6      | 11604                                | 1.5                    | 9.3      |
| Nondurables                                        | 145.9                                                                     | 1.2                    | 3.9      | 7972                                 | 0.5                    | 3.8      |
| Trans., Comm., & Public Utilities                  | 95.9                                                                      | 1.8                    | 3.2      | 5144                                 | 0.8                    | 2.9      |
| Trade                                              | 450.4                                                                     | 2.4                    | 5.7      | 21636                                | 1.1                    | 4.7      |
| Fin., Ins., & Real Estate                          | 104.9                                                                     | 1.7                    | 4.5      | 5655                                 | 1.1                    | 3.6      |
| Services                                           | 409.5                                                                     | 1.0                    | 5.2      | 20549                                | 1.4                    | 5.2      |
| Government                                         | 292.6                                                                     | 0.3                    | 2.6      | 15878                                | 0.1                    | 0.3      |
| Average Weekly Hours*                              |                                                                           |                        |          |                                      |                        |          |
| Mining                                             | 39.1                                                                      | 6.5                    | 15.0     | 43.5                                 | 1.2                    | 3.3      |
| Construction                                       | 36.9                                                                      | -2.9                   | 1.4      | 38.1                                 | 3.8                    | 1.9      |
| Manufacturing                                      | 40.7                                                                      | 0.5                    | 4.4      | 40.8                                 | 0.0                    | 2.0      |
| Durables                                           | 41.8                                                                      | 0.5                    | 5.3      | 41.5                                 | -0.2                   | 2.7      |
| Nondurables                                        | 39.3                                                                      | 0.3                    | 2.3      | 39.9                                 | 0.0                    | 1.0      |
| Trans., Comm., & Public Utilities                  | 38.5                                                                      | 1.0                    | 1.3      | 39.4                                 | 0.3                    | 1.3      |
| Trade                                              | 30.5                                                                      | 0.3                    | 1.3      | 32.3                                 | 0.3                    | 0.9      |
| Fin., Ins., & Real Estate                          | n.a.                                                                      | n.a.                   | n.a.     | 36.4                                 | 0.0                    | 0.6      |
| Services                                           | n.a.                                                                      | n.a.                   | n.a.     | 32.8                                 | 0.0                    | 0.3      |
| Average Hourly Wage                                |                                                                           |                        |          |                                      |                        |          |
| Mining                                             | 13.07                                                                     | 1.8                    | 8.2      | 11.59                                | 0.4                    | 3.4      |
| Construction                                       | 14.99                                                                     | -2.0                   | 2.6      | 11.95                                | -0.5                   | 1.1      |
| Manufacturing                                      | 9.65                                                                      | -0.2                   | 0.7      | 9.11                                 | 0.3                    | 3.9      |
| Durables                                           | 9.73                                                                      | -0.2                   | 1.1      | 9.67                                 | 0.3                    | 3.9      |
| Nondurables                                        | 9.53                                                                      | -0.3                   | -0.1     | 8.29                                 | 0.4                    | 3.1      |
| Trans., Comm., & Public Utilities                  | 11.19                                                                     | 0.2                    | 2.1      | 11.05                                | 0.1                    | 3.1      |
| Trade                                              | 7.52                                                                      | 0.1                    | 2.7      | 6.73                                 | 0.0                    | 3.7      |
| Fin., Ins., & Real Estate                          | n.a.                                                                      | n.a.                   | n.a.     | 7.56                                 | 0.3                    | 4.3      |
| Services                                           | n.a.                                                                      | n.a.                   | n.a.     | 7.56                                 | 0.1                    | 4.3      |
| Estimates of Labor Turnover (Mfg. Only)            | Estimates of Labor Turnover have been discontinued as of January 1, 1982. |                        |          |                                      |                        |          |

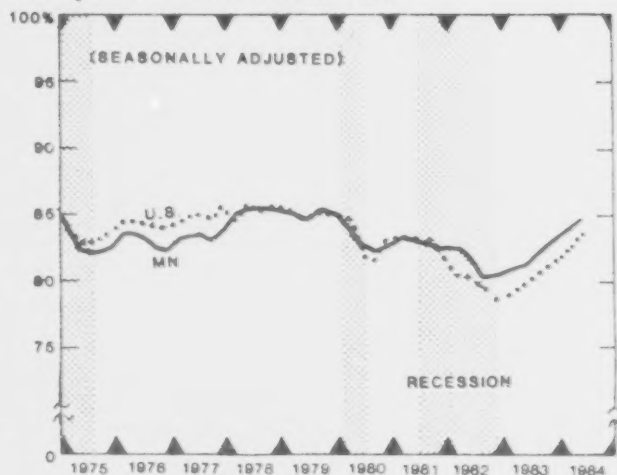
a/ Values are numerical values, not percent changes.

# Labor Market Conditions

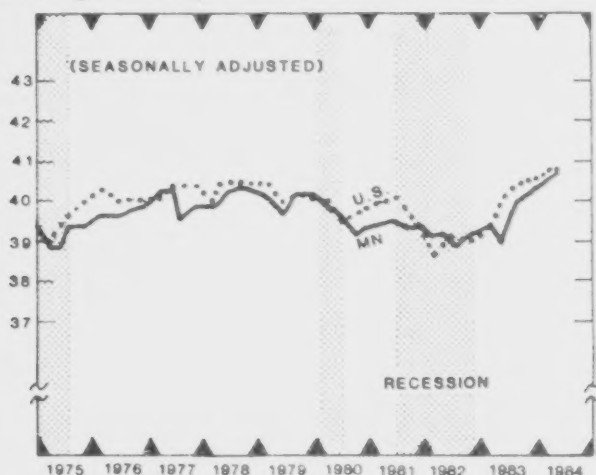
## Ratio of Service to Goods Producing Jobs



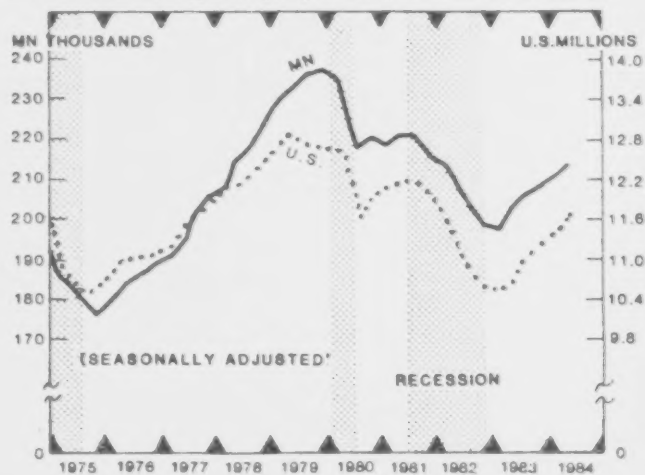
## Manpower Utilization Rate



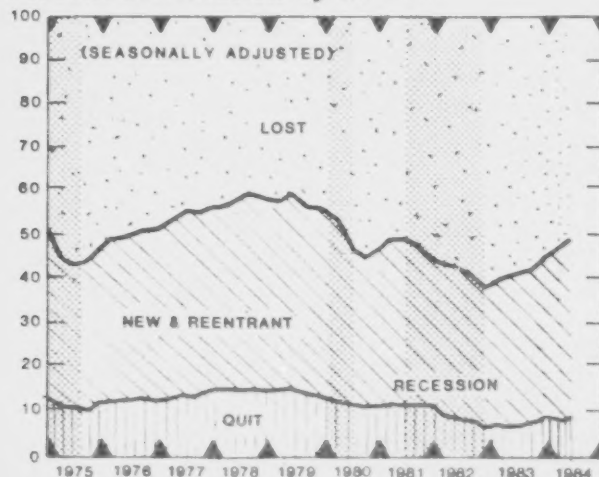
## Average Weekly Hours, Manufacturing



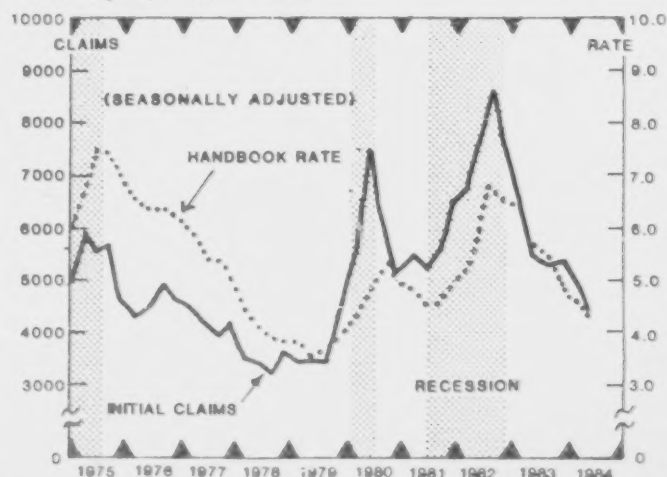
## Manufacturing Employment, Durable Goods



## U.S. Unemployment: Percent Distribution by Reason



## MN Weekly Initial Claims & Handbook Unemployment Rate<sup>1</sup>



# Labor Market Conditions

The Table below provides data on persons who file claims for unemployment compensation in Minnesota. Only those claiming benefits from the regular State program are represented, since data on the characteristics of Federal employees and veterans are not available, and data on those receiving benefits from

extended programs is reported only when those programs are in effect. If those receiving extended benefits were included they would distort the numerical comparisons over time, but would not substantially change the percentage distributions other than to increase the proportion of long-term unemployed.

| Persons Claiming<br>Benefits | Second Quarter 1984 |                     |             | April 1984 |                     |             | Percent<br>Long<br>Term |
|------------------------------|---------------------|---------------------|-------------|------------|---------------------|-------------|-------------------------|
|                              | Number              | Percent Change From |             | Number     | Percent Change From |             |                         |
|                              |                     | Last<br>Qtr.        | Year<br>Ago |            | Month<br>Ago        | Year<br>Ago |                         |
| <u>By Age &amp; Sex</u>      |                     |                     |             |            |                     |             |                         |
| Male                         | 22209               | -49.1               | -33.9       | 14767      | -4.8                | -30.3       | 22.3                    |
| Under 45                     | 16992               | -50.0               | -34.6       | 11435      | -3.6                | -28.9       | 20.9                    |
| Under 25                     | 3841                | -55.5               | -41.6       | 2519       | -3.1                | -34.1       | 18.7                    |
| 25-34                        | 8632                | -49.4               | -33.6       | 5738       | -4.2                | -27.4       | 21.0                    |
| 35-44                        | 4519                | -45.7               | -29.2       | 3178       | -3.1                | -27.1       | 22.5                    |
| 45 and Over                  | 5217                | -45.9               | -31.8       | 3332       | -8.4                | -34.9       | 27.2                    |
| 45-54                        | 2865                | -48.0               | -32.3       | 1814       | -8.1                | -34.7       | 24.7                    |
| 55 and Over                  | 2352                | -43.2               | -31.0       | 1518       | -8.7                | -35.2       | 30.2                    |
| Female                       | 11257               | -9.8                | -23.5       | 13187      | 3.1                 | -5.8        | 17.5                    |
| Under 45                     | 8162                | -9.9                | -24.5       | 9702       | 4.3                 | -4.7        | 16.3                    |
| Under 25                     | 1867                | -23.9               | -32.4       | 1868       | -1.8                | -20.3       | 14.9                    |
| 25-34                        | 3834                | -5.1                | -21.4       | 4761       | 4.7                 | 3.0         | 15.8                    |
| 35-44                        | 2461                | -4.1                | -22.3       | 3073       | 7.7                 | -4.4        | 18.0                    |
| 45 and Over                  | 3095                | -9.7                | -21.0       | 3485       | -0.1                | -8.7        | 20.7                    |
| 45-54                        | 1707                | -7.8                | -21.7       | 1991       | 1.2                 | -7.0        | 18.9                    |
| 55 and Over                  | 1388                | -12.0               | -20.1       | 1494       | -1.8                | -10.8       | 23.1                    |
| <u>By Industry</u>           |                     |                     |             |            |                     |             |                         |
|                              | 33466               | -40.4               | -30.8       | 27954      | -1.2                | -20.6       | 20.0                    |
| Ag., For., Fish.             | 514                 | -72.0               | -27.5       | 288        | -0.3                | -15.0       | 15.9                    |
| Mining                       | 390                 | -81.8               | -74.8       | 116        | -26.1               | -90.9       | 40.2                    |
| Construction                 | 7409                | -60.7               | -23.6       | 2349       | -28.6               | -35.4       | 20.7                    |
| Manufacturing                | 8891                | -30.5               | -36.7       | 7793       | 5.0                 | -17.2       | 22.0                    |
| Pub. Utilities               | 1569                | -33.5               | -37.0       | 1250       | -3.0                | -36.4       | 21.0                    |
| Wholesale Trade              | 2029                | -32.0               | -42.3       | 1755       | -0.5                | -33.5       | 25.2                    |
| Retail Trade                 | 3921                | -29.3               | -37.2       | 3418       | -1.6                | -36.5       | 26.7                    |
| Fin., Ins., Real Est.        | 906                 | -10.0               | -22.7       | 960        | 4.6                 | -8.9        | 28.4                    |
| Services                     | 6716                | -1.5                | -9.6        | 9008       | 3.5                 | 8.8         | 14.1                    |
| Public Admin.                | 607                 | -50.9               | -15.0       | 575        | 9.1                 | -6.0        | 18.3                    |
| Inf. Not Available           | 514                 | -11.7               | -32.4       | 442        | -5.4                | -27.2       | 3.0                     |
| <u>By Occupation</u>         |                     |                     |             |            |                     |             |                         |
|                              | 33466               | -40.4               | -30.8       | 27954      | -1.2                | -20.6       | 20.0                    |
| Prof., Tech., Mgr.           | 4891                | 2.8                 | -22.1       | 6680       | 7.3                 | -3.7        | 16.1                    |
| Clerical                     | 3710                | -7.8                | -28.9       | 4114       | 4.9                 | -18.4       | 22.0                    |
| Sales                        | 1296                | -16.2               | -34.0       | 1274       | 3.6                 | -24.4       | 28.0                    |
| Services                     | 2723                | -20.0               | -21.3       | 2885       | -1.2                | -8.8        | 19.2                    |
| Farm., For., Fish.           | 457                 | -71.2               | -16.9       | 210        | -11.8               | -8.7        | 20.9                    |
| Processing                   | 1847                | -39.1               | -34.4       | 1118       | -16.3               | -34.4       | 19.1                    |
| Machine Trade                | 1819                | -28.9               | -45.5       | 1618       | 0.9                 | -28.5       | 23.0                    |
| Benchwork                    | 2675                | -29.9               | -33.1       | 2612       | 8.2                 | -9.0        | 22.0                    |
| Structural Work              | 8417                | -58.3               | -27.2       | 3622       | -15.4               | -28.8       | 20.0                    |
| Misc.                        | 5286                | -50.8               | -38.2       | 3482       | -8.2                | -38.4       | 20.4                    |
| Inf. Not Available           | 345                 | -26.1               | -41.6       | 339        | -0.6                | -38.4       | 18.9                    |
| <u>By Duration</u>           |                     |                     |             |            |                     |             |                         |
|                              | 33466               | -40.4               | -30.8       | 27954      | -1.2                | -20.6       | -                       |
| 0-14 Weeks                   | 24934               | -47.2               | -24.2       | 22363      | -0.9                | -13.4       | -                       |
| 15+ Weeks (Long-Term)        | 8532                | -4.0                | -44.7       | 5591       | -2.7                | -40.3       | -                       |



# Labor Market Conditions

## Minnesota Nonagricultural Wage & Salary Employment, Hours, and Earnings

| INDUSTRY                          | EMPLOYMENT <sup>1/</sup><br>(thousands) |              |              | PER CENT<br>CHANGE<br>FROM |              | PRODUCTION WORKERS' HOURS & EARNINGS |              |                               |              |                            |              |
|-----------------------------------|-----------------------------------------|--------------|--------------|----------------------------|--------------|--------------------------------------|--------------|-------------------------------|--------------|----------------------------|--------------|
|                                   |                                         |              |              |                            |              | Average<br>Weekly<br>Earnings        |              | Average<br>Hourly<br>Earnings |              | Average<br>Weekly<br>Hours |              |
|                                   | July<br>1984                            | June<br>1984 | July<br>1983 | June<br>1984               | July<br>1983 | July<br>1984                         | June<br>1984 | July<br>1984                  | June<br>1984 | July<br>1984               | June<br>1984 |
| TOTAL NONAGRICULTURAL             | 1819.7                                  | 1832.2       | 1716.4       | -0.7                       | 6.0          |                                      |              |                               |              |                            |              |
| MANUFACTURING                     | 375.1                                   | 372.9        | 348.3        | 0.6                        | 7.7          | 382.40                               | 390.42       | 9.56                          | 9.64         | 40.0                       | 40.5         |
| Durable Goods                     | 224.7                                   | 225.2        | 205.4        | -0.2                       | 9.4          | 393.87                               | 405.32       | 9.63                          | 9.72         | 40.9                       | 41.7         |
| Furniture, Lumber and Wood        | 16.9                                    | 16.8         | 15.6         | 0.6                        | 8.5          | 396.21                               | 423.42       | 9.98                          | 10.01        | 39.7                       | 42.3         |
| Stone, Clay and Glass             | 9.9                                     | 9.8          | 9.5          | 1.2                        | 4.6          | 384.29                               | 384.92       | 10.06                         | 10.05        | 38.2                       | 38.3         |
| Primary Metals                    | 6.1                                     | 6.2          | 5.5          | -1.5                       | 11.1         | 367.20                               | 383.72       | 9.00                          | 9.05         | 40.8                       | 42.4         |
| Fabricated Metals                 | 34.4                                    | 34.1         | 32.5         | 1.1                        | 6.0          | 451.11                               | 454.62       | 10.87                         | 10.85        | 41.5                       | 41.9         |
| Nonelectrical Machinery           | 88.2                                    | 88.0         | 79.5         | 0.2                        | 10.9         | 413.66                               | 425.57       | 9.92                          | 9.99         | 41.7                       | 42.6         |
| Electrical Machinery              | 29.5                                    | 29.3         | 26.1         | 0.8                        | 13.1         | 319.56                               | 322.32       | 7.91                          | 7.90         | 40.4                       | 40.8         |
| Transportation Equipment          | 5.9                                     | 7.4          | 5.0          | -21.0                      | 16.5         | 375.72                               | 468.03       | 9.01                          | 10.71        | 41.7                       | 43.7         |
| Other Durable Goods <sup>2/</sup> | 33.8                                    | 33.6         | 31.7         | 0.6                        | 6.8          | 377.81                               | 371.16       | 9.26                          | 9.21         | 40.8                       | 40.3         |
| Nondurable Goods                  | 150.3                                   | 147.7        | 143.0        | 1.8                        | 5.1          | 367.82                               | 370.15       | 9.48                          | 9.54         | 38.8                       | 38.8         |
| Food and Kindred                  | 48.1                                    | 45.8         | 48.2         | 4.9                        | -0.3         | 313.94                               | 317.22       | 8.24                          | 8.37         | 38.1                       | 37.9         |
| Textile and Apparel               | 5.3                                     | 5.3          | 5.1          | -0.2                       | 4.7          | 219.83                               | 219.73       | 5.99                          | 6.02         | 36.7                       | 36.5         |
| Paper and Allied                  | 34.1                                    | 34.0         | 32.7         | 0.4                        | 4.3          | 482.54                               | 479.70       | 11.17                         | 11.13        | 43.2                       | 43.1         |
| Printing and Publishing           | 40.5                                    | 40.0         | 35.6         | 1.2                        | 13.6         | 368.28                               | 373.83       | 10.23                         | 10.27        | 36.0                       | 36.4         |
| Chemical and Petroleum            | 9.7                                     | 9.6          | 9.5          | 0.7                        | 2.1          | 464.63                               | 455.80       | 11.25                         | 11.09        | 41.3                       | 41.1         |
| Rubber and Leather                | 12.6                                    | 12.9         | 11.9         | -2.1                       | 6.3          | 302.02                               | 310.31       | 7.99                          | 8.06         | 37.8                       | 38.5         |
| NONMANUFACTURING                  | 1444.7                                  | 1459.3       | 1368.1       | -1.0                       | 5.6          |                                      |              |                               |              |                            |              |
| Mining and Quarrying              | 11.2                                    | 11.1         | 10.5         | 0.6                        | 6.7          | 528.12                               | 512.31       | 13.17                         | 13.17        | 40.1                       | 38.9         |
| Metal Mining                      | 8.7                                     | 8.7          | 8.1          | 0.1                        | 7.6          | 545.80                               | 533.74       | 14.14                         | 14.12        | 38.6                       | 37.8         |
| Construction                      | 81.8                                    | 77.2         | 69.5         | 5.9                        | 17.6         | 591.07                               | 543.16       | 14.74                         | 14.68        | 40.1                       | 37.0         |
| Building                          | 22.9                                    | 21.2         | 19.4         | 8.1                        | 18.5         | 507.68                               | 499.74       | 13.36                         | 13.58        | 38.0                       | 36.8         |
| Highway and Heavy                 | 16.5                                    | 15.0         | 14.0         | 9.4                        | 17.1         | 555.54                               | 477.98       | 12.98                         | 12.48        | 42.8                       | 38.3         |
| Special Trades                    | 42.4                                    | 41.0         | 36.1         | 3.5                        | 17.4         | 651.64                               | 591.97       | 16.21                         | 16.13        | 40.2                       | 36.7         |
| Transportation                    | 60.9                                    | 61.9         | 57.7         | -1.5                       | 5.6          |                                      |              |                               |              |                            |              |
| Railroads                         | 10.2                                    | 10.4         | 10.8         | -1.9                       | -6.0         | 550.10                               | 550.10       | 11.83                         | 11.83        | 46.5                       | 46.5         |
| Trucking and Warehousing          | 25.4                                    | 25.1         | 23.8         | 1.0                        | 6.8          | 423.26                               | 425.29       | 11.66                         | 11.62        | 36.3                       | 36.6         |
| Public Utilities                  | 34.6                                    | 34.5         | 34.2         | 0.3                        | 1.1          | 531.20                               | 531.62       | 12.80                         | 12.81        | 41.5                       | 41.5         |
| Communications                    | 20.0                                    | 20.0         | 20.1         | -0.2                       | -0.4         | 513.65                               | 513.32       | 11.89                         | 11.91        | 43.2                       | 43.1         |
| Elec., Gas and Sanitary           | 14.6                                    | 14.5         | 14.2         | 1.0                        | 3.4          | 550.42                               | 554.21       | 13.97                         | 13.96        | 39.4                       | 39.7         |
| Trade                             | 464.1                                   | 461.7        | 432.0        | 0.5                        | 7.4          | 232.06                               | 230.58       | 7.51                          | 7.56         | 30.9                       | 30.5         |
| Retail                            | 347.8                                   | 346.5        | 321.3        | 0.4                        | 8.3          | 185.98                               | 184.80       | 6.48                          | 6.53         | 28.7                       | 28.3         |
| General Merchandise               | 49.0                                    | 48.2         | 43.3         | 1.7                        | 13.1         | 164.99                               | 168.19       | 5.83                          | 5.84         | 28.3                       | 28.8         |
| Food Stores                       | 47.1                                    | 46.7         | 45.2         | 0.9                        | 4.1          | 222.21                               | 222.14       | 7.61                          | 7.53         | 29.2                       | 29.5         |
| Automotive                        | 36.5                                    | 36.5         | 34.1         | -0.2                       | 7.0          | 315.09                               | 317.58       | 8.38                          | 8.63         | 37.6                       | 36.8         |
| Eating and Drinking               | 119.5                                   | 119.2        | 109.0        | 0.2                        | 9.6          | 108.09                               | 105.78       | 4.58                          | 4.66         | 23.6                       | 22.7         |
| Wholesale                         | 116.3                                   | 115.1        | 110.7        | 1.0                        | 5.1          | 401.95                               | 399.77       | 10.28                         | 10.33        | 39.1                       | 38.7         |
| F.I.R.E.                          | 106.7                                   | 106.3        | 102.0        | 0.3                        | 4.5          |                                      |              |                               |              |                            |              |
| Finance                           | 49.3                                    | 49.1         | 48.8         | 0.4                        | 1.0          |                                      |              |                               |              |                            |              |
| Insurance                         | 38.0                                    | 38.1         | 35.8         | -0.3                       | 6.2          |                                      |              |                               |              |                            |              |
| Real Estate                       | 19.4                                    | 19.2         | 17.5         | 1.2                        | 10.8         |                                      |              |                               |              |                            |              |
| Service Industries                | 412.5                                   | 410.9        | 394.7        | 0.4                        | 4.5          |                                      |              |                               |              |                            |              |
| Hotel and Lodging                 | 25.6                                    | 25.1         | 22.9         | 2.0                        | 11.8         |                                      |              |                               |              |                            |              |
| Business Services                 | 69.5                                    | 69.1         | 62.8         | 0.6                        | 10.7         |                                      |              |                               |              |                            |              |
| Health Services                   | 130.7                                   | 128.2        | 134.6        | 1.9                        | -2.9         |                                      |              |                               |              |                            |              |
| Private Education                 | 17.3                                    | 20.0         | 17.0         | -13.5                      | 1.6          |                                      |              |                               |              |                            |              |
| Soc. Serv., Museums etc.          | 90.4                                    | 89.8         | 85.1         | 0.7                        | 6.3          |                                      |              |                               |              |                            |              |
| Government                        | 272.9                                   | 295.7        | 267.5        | -7.7                       | 2.0          |                                      |              |                               |              |                            |              |
| Federal                           | 31.6                                    | 31.4         | 30.5         | 0.7                        | 3.4          |                                      |              |                               |              |                            |              |
| State                             | 64.7                                    | 70.4         | 62.8         | -8.1                       | 3.0          |                                      |              |                               |              |                            |              |
| Local                             | 176.7                                   | 193.9        | 174.1        | -8.9                       | 1.4          |                                      |              |                               |              |                            |              |

<sup>1/</sup> Totals may not add because of rounding.

<sup>2/</sup> Includes Scientific Instruments and Miscellaneous Industries.

# Labor Market Conditions

## Labor Force Data: State, SMSAs, and Counties

| Area or County                             | July, 1984 Prelim.           |        |             | Area or County          | July, 1984 Prelim.           |        |             |
|--------------------------------------------|------------------------------|--------|-------------|-------------------------|------------------------------|--------|-------------|
|                                            | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |                         | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |
| State of Minnesota                         | 2290294                      | 137396 | 6.0         | Lake                    | 4383                         | 577    | 13.2        |
| Metropolitan Areas                         |                              |        |             | Lake of the Woods       | 2110                         | 166    | 7.9         |
| Duluth/Superior<br>(Duluth City Only)      | 36100                        | 3314   | 9.2         | Le Sueur                | 13429                        | 946    | 7.0         |
| Fargo/Moorhead<br>(Clay County, MN Only)   | 28282                        | 1596   | 5.6         | Lincoln                 | 4560                         | 246    | 5.4         |
| Minneapolis/St. Paul SMSA <sup>2/</sup>    | 1234666                      | 62103  | 5.0         | Lyon                    | 16564                        | 817    | 4.9         |
| Rochester SMSA <sup>3/</sup> (Olmsted Co.) | 60874                        | 2537   | 4.2         | McLeod                  | 18611                        | 892    | 4.8         |
| St. Cloud SMSA <sup>3/</sup>               | 82848                        | 6338   | 7.7         | Mahnomen                | 3304                         | 341    | 10.3        |
| Counties                                   |                              |        |             | Marshall                | 7079                         | 866    | 12.2        |
| Aitkin                                     | 5969                         | 773    | 13.0        | Martin                  | 14913                        | 786    | 5.3         |
| Anoka                                      | 117177                       | 6173   | 5.3         | Meeker                  | 12103                        | 1048   | 8.7         |
| Becker                                     | 14008                        | 1482   | 10.6        | Mille Lacs              | 9605                         | 748    | 7.8         |
| Beltrami                                   | 17293                        | 1353   | 7.8         | Morrison                | 13985                        | 1311   | 9.4         |
| Benton                                     | 12859                        | 1055   | 8.2         | Mower                   | 18629                        | 1117   | 6.0         |
| Big Stone                                  | 4416                         | 264    | 6.0         | Murray                  | 7014                         | 450    | 6.4         |
| Blue Earth                                 | 29424                        | 1392   | 4.7         | Nicollet                | 15109                        | 679    | 4.5         |
| Brown                                      | 16347                        | 879    | 5.4         | Nobles                  | 13227                        | 804    | 6.1         |
| Carlton                                    | 12272                        | 1236   | 10.1        | Norman                  | 5235                         | 303    | 5.8         |
| Carver                                     | 21803                        | 822    | 3.8         | Olmsted                 | 60874                        | 2537   | 4.2         |
| Cass                                       | 11915                        | 1019   | 8.6         | Otter Tail              | 27515                        | 2176   | 7.9         |
| Chippewa                                   | 8516                         | 600    | 7.0         | Pennington              | 6671                         | 543    | 8.1         |
| Chisago                                    | 15263                        | 698    | 4.6         | Pine                    | 10445                        | 910    | 8.7         |
| Clay                                       | 28282                        | 1596   | 5.6         | Pipestone               | 6223                         | 249    | 4.0         |
| Clearwater                                 | 4500                         | 709    | 15.8        | Polk                    | 18824                        | 1740   | 9.2         |
| Cook                                       | 2642                         | 215    | 8.1         | Pope                    | 6229                         | 346    | 5.6         |
| Cottonwood                                 | 8499                         | 820    | 9.6         | Ramsey                  | 274572                       | 14173  | 5.2         |
| Crow Wing                                  | 19097                        | 1523   | 8.0         | Red Lake                | 2437                         | 318    | 13.0        |
| Dakota                                     | 115391                       | 5456   | 4.7         | Redwood                 | 11723                        | 538    | 4.6         |
| Dodge                                      | 9419                         | 647    | 6.9         | Renville                | 12918                        | 1019   | 7.9         |
| Douglas                                    | 14839                        | 792    | 5.3         | Rice                    | 24998                        | 1782   | 7.1         |
| Faribault                                  | 11942                        | 556    | 4.7         | Rock                    | 6555                         | 230    | 3.5         |
| Fillmore                                   | 13670                        | 849    | 6.2         | Roseau                  | 6716                         | 535    | 8.0         |
| Freeborn                                   | 19172                        | 1412   | 7.4         | St. Louis (Inc. Duluth) | 87155                        | 8651   | 9.9         |
| Goodhue                                    | 21527                        | 1396   | 6.5         | Scott                   | 25962                        | 1165   | 4.5         |
| Grant                                      | 3879                         | 197    | 5.1         | Sherburne               | 15139                        | 1123   | 7.4         |
| Hennepin                                   | 562540                       | 29371  | 5.2         | Sibley                  | 9309                         | 554    | 6.0         |
| Houston                                    | 10758                        | 566    | 5.3         | Stearns                 | 54850                        | 4160   | 7.6         |
| Hubbard                                    | 6489                         | 685    | 10.6        | Steele                  | 17881                        | 999    | 5.6         |
| Isanti                                     | 10979                        | 752    | 6.8         | Stevens                 | 6355                         | 289    | 4.5         |
| Itasca                                     | 17515                        | 1845   | 10.5        | Swift                   | 7112                         | 678    | 9.5         |
| Jackson                                    | 8740                         | 530    | 6.1         | Todd                    | 12920                        | 947    | 7.3         |
| Kanabec                                    | 5926                         | 576    | 9.7         | Traverse                | 3180                         | 132    | 4.2         |
| Kandiyohi                                  | 19878                        | 1063   | 5.3         | Wabasha                 | 10909                        | 794    | 7.3         |
| Kittson                                    | 3878                         | 346    | 8.9         | Wadena                  | 6037                         | 476    | 7.9         |
| Koochiching                                | 8048                         | 675    | 8.4         | Waseca                  | 9443                         | 440    | 4.7         |
| Lac qui Parle                              | 6451                         | 328    | 5.1         | Washington              | 67171                        | 2850   | 4.2         |
|                                            |                              |        |             | Watonwan                | 7207                         | 416    | 5.8         |
|                                            |                              |        |             | Wilkin                  | 4734                         | 266    | 5.6         |
|                                            |                              |        |             | Winona                  | 23568                        | 1764   | 7.5         |
|                                            |                              |        |             | Wright                  | 34787                        | 1395   | 4.0         |
|                                            |                              |        |             | Yellow Medicine         | 8692                         | 453    | 5.2         |

### Technical Notes:

1/ Labor force data is computed according to BLS methodology. The method includes an adjustment to assure that the sum of the substate areas equals the separately estimated State total. This adjustment is Applied to all county and SMSA areas. County and area unemployment was multiplied by an adjustment factor of 1.63; employment was multiplied by 1.03. For a more detailed explanation see the Review of Labor and Economic Conditions, Vol. 4, No. 4, (February 1978 issue), p. 29.

2/ Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright Counties.

3/ Benton, Sherburne, and Stearns Counties.

# Income & Purchasing Power

This section describes how Minnesotans fare with respect to their ability to acquire goods and services needed to meet their needs and wants and how they compare with others in the United States in this respect. Real Per Capita Personal Income measures money income received by all individuals from wages and salaries, dividends, rent, professional and farm income, personal interest payments, and transfer payments, less personal contributions for social security, all adjusted for the price level as indicated by the CPI

and for population. The Consumer Price Index (CPI) measures changes in the price of a representative combination of goods and services consumed by urban wage and salary workers relative to 1967. The inverse of the CPI (1/CPI) indicates the value of the dollar; when the CPI increases the value of the dollar falls. The change in the CPI over any period of time divided by the value at the beginning of the period gives the percentage change, or the rate of inflation.

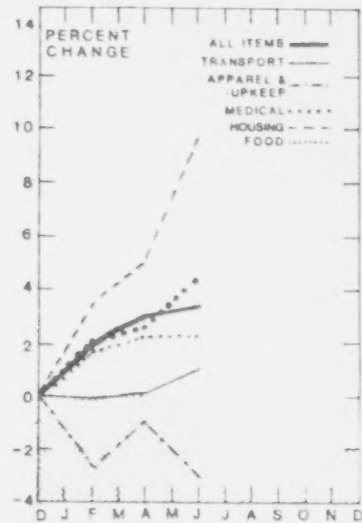
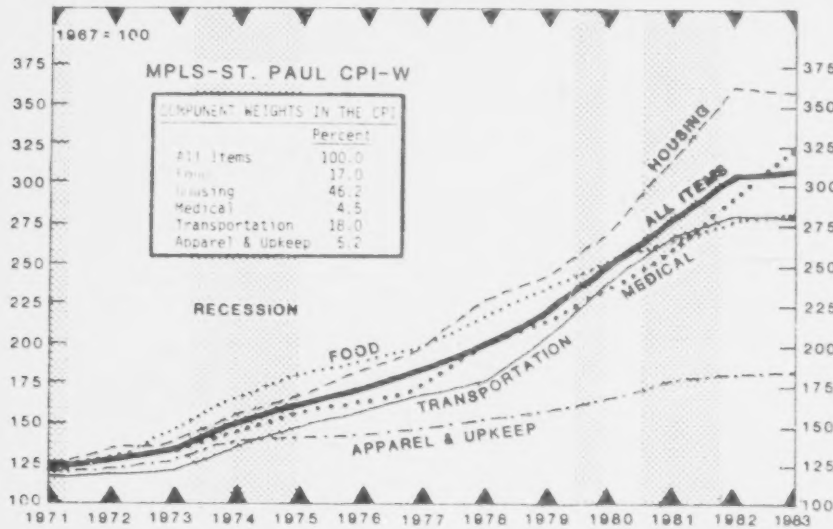
| Income And Purchasing Power                                                                                                                                 | MINNESOTA       |                        |          | UNITED STATES   |                        |          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------|----------|-----------------|------------------------|----------|
|                                                                                                                                                             | II Qtr.<br>1984 | Percent Change<br>from |          | II Qtr.<br>1984 | Percent Change<br>from |          |
|                                                                                                                                                             |                 | Last Qtr.              | Year Ago |                 | Last Qtr.              | Year Ago |
| <u>INCOME STATISTICS</u>                                                                                                                                    |                 |                        |          |                 |                        |          |
| Personal Income 1/ *                                                                                                                                        |                 |                        |          |                 |                        |          |
| Total Personal Income (in Billions)                                                                                                                         | 54.1            | 3.2                    | 12.5     | 2984.8          | 2.2                    | 10.0     |
| Due to Labor 2/                                                                                                                                             | n.a.            | n.a.                   | n.a.     | 1985.5          | 64.7                   | 64.2     |
| Due to Property 3/                                                                                                                                          | n.a.            | n.a.                   | n.a.     | 715.0           | 31.3                   | 37.4     |
| Due to Transfer Payments 4/                                                                                                                                 | n.a.            | n.a.                   | n.a.     | 416.0           | 7.3                    | 3.2      |
| Total Disposable Personal Income                                                                                                                            | n.a.            | n.a.                   | n.a.     | 2557.6          | 2.2                    | 11.1     |
| As Percent of Total Pers. Inc.                                                                                                                              | n.a.            | n.a.                   | n.a.     | 85.7            | 0.0                    | 1.1      |
| Per Capita Personal Income 5/                                                                                                                               |                 |                        |          |                 |                        |          |
| Current dollar Value                                                                                                                                        | 12916           | 3.2                    | 11.7     | 12632           | 2.0                    | 9.0      |
| Real (1967) Dollar Value                                                                                                                                    | 3974            | 1.0                    | 7.2      | 4139            | 1.3                    | 5.7      |
| Real Median Family Money Income 5/ *                                                                                                                        |                 |                        |          |                 |                        |          |
| All Families                                                                                                                                                | 9115            | 0.6                    | 5.9      | 9173            | 1.1                    | 5.0      |
| Four Person Families                                                                                                                                        | 9391            | 0.3                    | 4.8      | 10704           | 1.2                    | 5.1      |
| Earnings of Production Workers in Mfg. 6/                                                                                                                   |                 |                        |          |                 |                        |          |
| Average Weekly Earnings                                                                                                                                     | 391.01          | -0.4                   | 5.0      | 372.13          | 0.8                    | 6.1      |
| Real Average Weekly Earnings 7/                                                                                                                             | 120.31          | -2.6                   | 0.8      | 121.93          | 0.1                    | 2.9      |
| Income Related Criteria 8/                                                                                                                                  |                 |                        |          |                 |                        |          |
| Standard Budgets                                                                                                                                            |                 |                        |          |                 |                        |          |
| Low                                                                                                                                                         |                 |                        |          |                 |                        |          |
| Moderate                                                                                                                                                    |                 |                        |          |                 |                        |          |
| High                                                                                                                                                        |                 |                        |          |                 |                        |          |
| Poverty Level Income                                                                                                                                        |                 |                        |          |                 |                        |          |
| Family of Four                                                                                                                                              | 10200           | ---                    | 3.0      | 10200           | ---                    | 3.0      |
| The U.S. Department of Labor, Bureau of Labor Statistics has discontinued the preparation of Standard Budgets, therefore, this data is no longer available. |                 |                        |          |                 |                        |          |
| <u>MEASURES OF PRICE CHANGE AND INFLATION</u>                                                                                                               |                 |                        |          |                 |                        |          |
| Consumer Price Level (CPI) 9/                                                                                                                               | 325.0           | 2.2                    | 4.1      | 305.2           | 0.7                    | 3.1      |
| Food                                                                                                                                                        | 308.0           | 0.7                    | 4.4      | 301.8           | 0.2                    | 3.3      |
| Housing                                                                                                                                                     | 383.1           | 3.9                    | 3.6      | 324.7           | 0.2                    | 1.1      |
| Transportation                                                                                                                                              | 292.9           | 0.9                    | 4.5      | 314.0           | 1.9                    | 5.8      |
| Medical                                                                                                                                                     | 353.3           | 1.6                    | 11.7     | 375.1           | 1.2                    | 6.5      |
| Purchasing Power of the Dollar (1/CPI)                                                                                                                      | .31             | -2.2                   | -3.8     | .33             | -0.6                   | -3.0     |
| Wholesale Price Index                                                                                                                                       | n.a.            | n.a.                   | n.a.     | 311.5           | 0.7                    | 3.3      |
| Industrial Commodities                                                                                                                                      | n.a.            | n.a.                   | n.a.     | 323.2           | 0.8                    | 3.0      |

The U.S. Department of Labor, Bureau of Labor Statistics has discontinued the preparation of Standard Budgets, therefore, this data is no longer available.

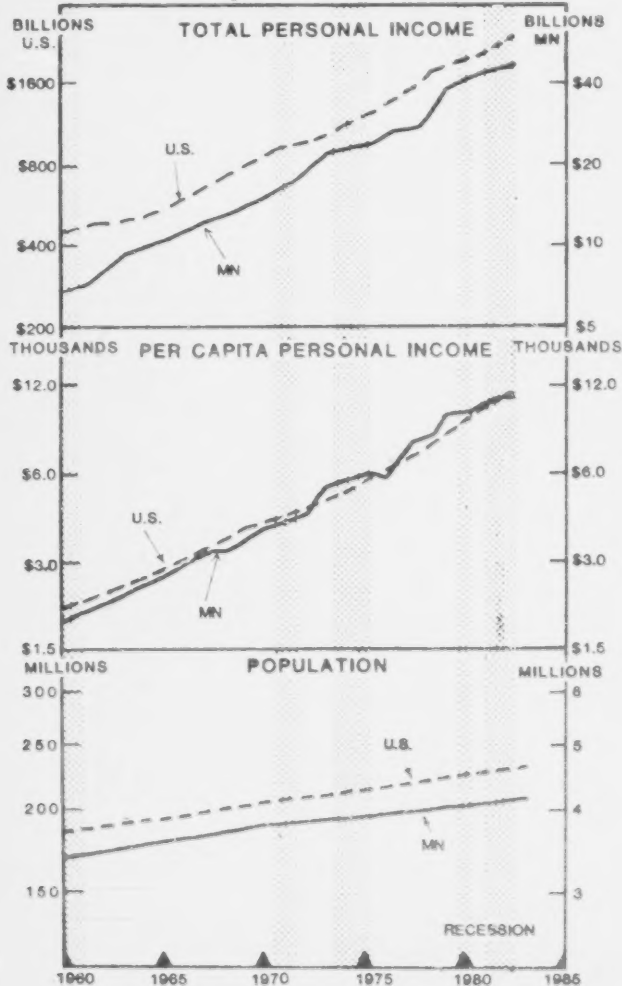
# Income & Purchasing Power

## Consumer Price Index- Major Components

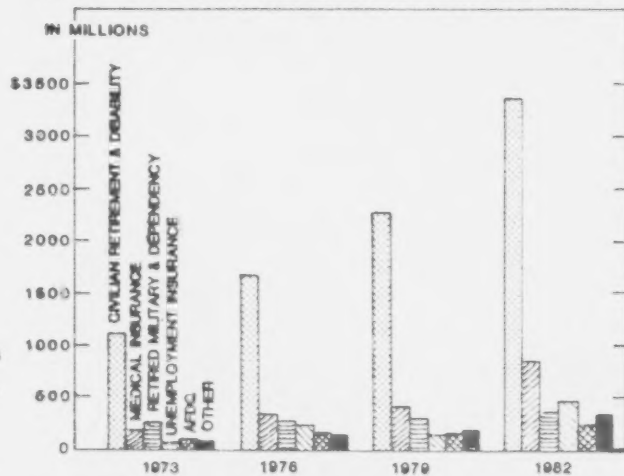
%  $\Delta$  From Dec. 1983



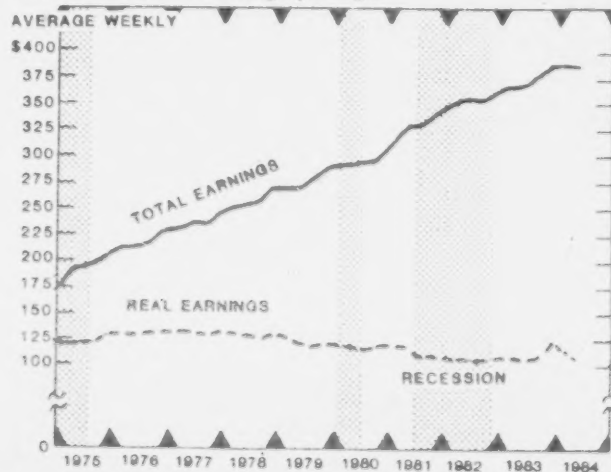
## U.S. & MN Personal Income And Population



## Government Transfer Payments To Individuals In Minnesota (Selected Years)



## Minnesota Earnings, Mfg.





# Output, Expenditures, Money, & Credit Conditions

The overall level and composition of National Output shape labor market conditions, and nominal and real earnings. (Nominal values are not adjusted for inflation; real values are adjusted for inflation.) Personal Consumption Expenditures, especially on Durable Goods, together with data on Retail Sales, are frequently used as indicators of future levels of employment. The number of Building Permits influences the level of employment in construction and related industries. The Federal Budget Deficit is a key indicator of the stimulatory effect of government policy. Whether this effect results in inflation, improved employment conditions, or some combination

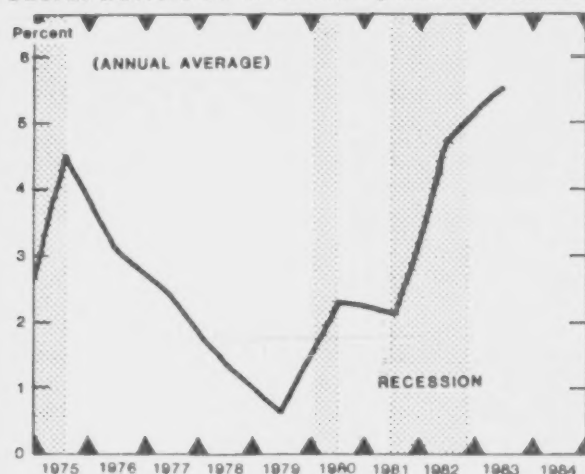
of the two, depends in part, upon the degree to which present productive capacity is utilized. Present and anticipated Money and Credit Conditions determine the ability of consumers, business, and State and Local governments to borrow in order to finance purchases, which, in turn, generate income and employment. Unfortunately, most data of this kind is available only for the Nation. However, in an economy as interdependent as ours, analysis of the directions of change of key national indicators is a useful tool for understanding the course of the State economy.

| Output, Expenditure, Money,<br>And Credit Conditions                                   | MINNESOTA        |                        |          | UNITED STATES    |                        |          |
|----------------------------------------------------------------------------------------|------------------|------------------------|----------|------------------|------------------------|----------|
|                                                                                        | II. Qtr.<br>1984 | Percent Change<br>from |          | II. Qtr.<br>1984 | Percent Change<br>from |          |
|                                                                                        |                  | Last Qtr.              | Year Ago |                  | Last Qtr.              | Year Ago |
| OUTPUT AND EXPENDITURE                                                                 |                  |                        |          |                  |                        |          |
| Retail Sales (in millions of dollars)*                                                 | 2108             | 1.6                    | 15.4     | 108189           | 2.7                    | 11.5     |
| Private Housing Units Authorized by*<br>Building Permits <sup>1/</sup>                 | 30140            | -15.9                  | 8.5      | 1757             | -2.9                   | 5.8      |
| Index of Industrial Production <sup>2/</sup> *                                         | n.a.             | n.a.                   | n.a.     | 162.9            | 1.9                    | 12.7     |
| Gross National Product (in billions of <sup>3/</sup><br>1972 dollars)*                 | n.a.             | n.a.                   | n.a.     | 1640.2           | 1.8                    | 7.6      |
| Personal Consumption Expenditures                                                      | n.a.             | n.a.                   | n.a.     | 1061.7           | 1.7                    | 5.5      |
| Durable Goods                                                                          | n.a.             | n.a.                   | n.a.     | 177.6            | 2.2                    | 13.7     |
| As Percent of Pers. Cons.                                                              | n.a.             | n.a.                   | n.a.     | 16.7             | 0.6                    | 7.7      |
| Nondurable Goods                                                                       | n.a.             | n.a.                   | n.a.     | 396.0            | 2.3                    | 5.6      |
| Services                                                                               | n.a.             | n.a.                   | n.a.     | 488.0            | 1.0                    | 2.7      |
| Gross Private Domestic Investment                                                      | n.a.             | n.a.                   | n.a.     | 286.2            | 0.2                    | 34.6     |
| As Percent of GNP                                                                      | n.a.             | n.a.                   | n.a.     | 17.4             | -1.7                   | 25.2     |
| Nonresidential, Fixed                                                                  | n.a.             | n.a.                   | n.a.     | 202.6            | 4.8                    | 22.6     |
| Residential                                                                            | n.a.             | n.a.                   | n.a.     | 62.0             | 2.3                    | 16.1     |
| Net Exports                                                                            | n.a.             | n.a.                   | n.a.     | -10.0            | #                      | #        |
| Government Purchases                                                                   | n.a.             | n.a.                   | n.a.     | 302.4            | 4.5                    | 3.4      |
| Federal                                                                                | n.a.             | n.a.                   | n.a.     | 123.7            | 10.2                   | 5.5      |
| State and Local                                                                        | n.a.             | n.a.                   | n.a.     | 178.7            | 0.8                    | 2.0      |
| GNP Gap (Full Empl. Minus Present GNP)*<br>1972 Dollars (in billions)                  | n.a.             | n.a.                   | n.a.     | n.a.             | n.a.                   | n.a.     |
| Current Dollars (in billions)                                                          | n.a.             | n.a.                   | n.a.     | n.a.             | n.a.                   | n.a.     |
| Current Federal Budget Deficit <sup>4/</sup> *<br>As Percent of GNP                    | n.a.             | n.a.                   | n.a.     | -4.6             | -4.5                   | -5.1     |
| Inventory to Sales: Durable Goods in Mfg.*                                             | n.a.             | n.a.                   | n.a.     | 1.85             | 2.8                    | -10.6    |
| New Orders to Shipments: Durable Goods*                                                | n.a.             | n.a.                   | n.a.     | 1.03             | -3.6                   | -0.6     |
| Plant Capacity Utilization Rate in Mfg. <sup>5/</sup> *                                | n.a.             | n.a.                   | n.a.     | 81.7             | 1.2                    | 10.7     |
| MONEY AND CREDIT CONDITIONS                                                            |                  |                        |          |                  |                        |          |
| Interest Rates                                                                         |                  |                        |          |                  |                        |          |
| Discount Rate                                                                          | 8.96             | 5.4                    | 5.4      | 8.96             | 5.4                    | 5.4      |
| Prime Rate                                                                             | n.a.             | n.a.                   | n.a.     | 12.30            | 11.1                   | 17.1     |
| Rate on Conventional Mortgages                                                         | 11.40            | -4.8                   | -10.4    | 12.15            | -0.5                   | -4.6     |
| Federal Funds Rate                                                                     | n.a.             | n.a.                   | n.a.     | 10.56            | 9.0                    | 20.0     |
| Consumer Installment Credit Outstanding<br>As Percent of Disposable<br>Personal Income | n.a.             | n.a.                   | n.a.     | 417772           | 4.7                    | 17.2     |
|                                                                                        | n.a.             | n.a.                   | n.a.     | 16.3             | 2.5                    | 5.6      |

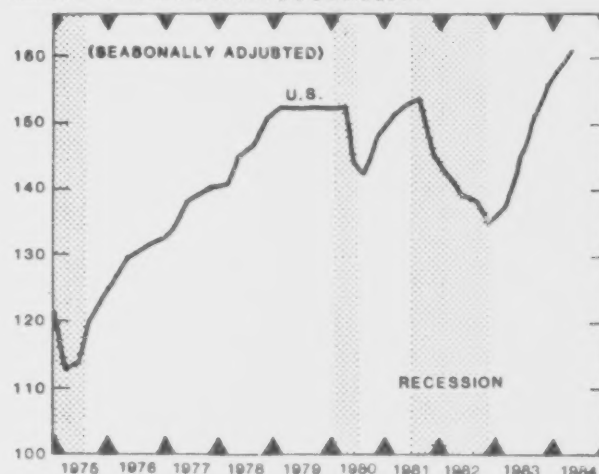
# Percentage change not applicable

# Output, Expenditures, Money, & Credit Conditions

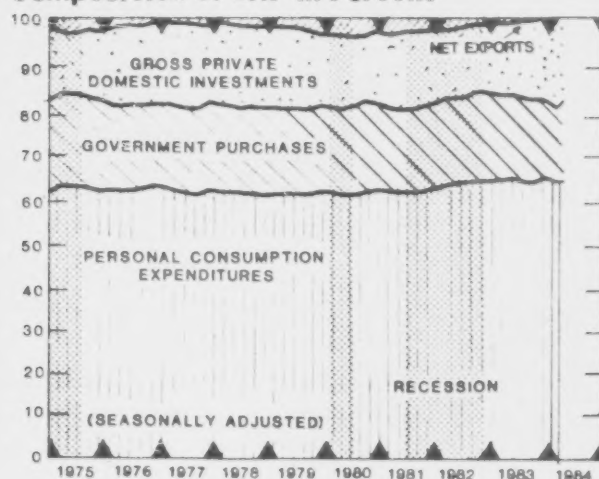
## Federal Deficit as % of GNP (Current Dollars)



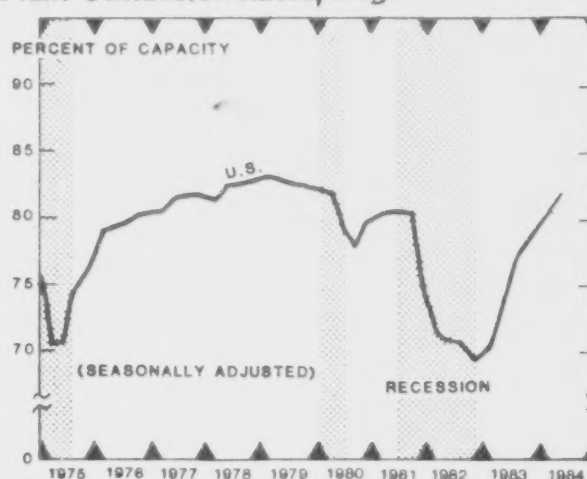
## Index of Industrial Production



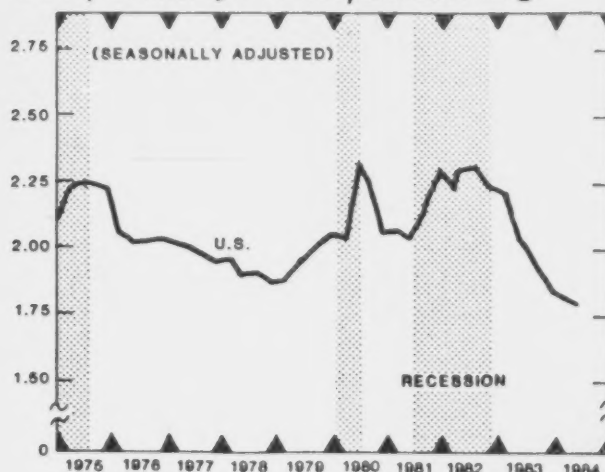
## Composition of GNP in Percent



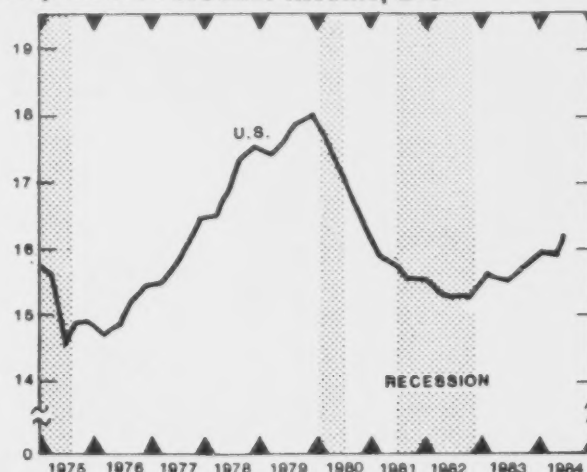
## Plant Utilization Rates, Mfg.



## Ratio, Inventory to Sales, Durable Mfg.



## Ratio, Consumer Installment Debt to Disposable Personal Income, U.S.



# Technical Notes

For the reader's convenience the notes which follow are organized in sequence for the pages which appear in the statistical section. Each note corresponds to the footnote or reference notation for the given page.

\* Wherever an asterik appears the data is seasonally adjusted.

## Page S-2

- 1/ Four percent is a generally agreed upon criteria for measuring full employment. It allows for the movement of persons between jobs. Labor Force Unemployment Rate less four percent, based on official estimates.
- 2/ Estimated worker hours expended in nonfarm payroll employment as a percent of potential worker hours assuming that each member of the nonfarm labor payroll labor force was employed at a standard rate of 40 hours per week.

## Page S-3

- 1/ The handbook unemployment rate is the estimate of unemployment prior to the Current Population Survey (CPS) adjustment.

## Page S-7

- 1/ In billions of dollars at an annual rate.
- 2/ The contribution to total Personal Income of wages, salaries, and other labor income. Percent change entry in Labor Income Impact is the percent that the change in labor income comprises of the change in total Personal Income. This is not available for Minnesota on a quarterly basis.
- 3/ The figure for the quarter is the contribution to total Personal Income of proprietor's rental, dividend, and interest income. The percent change entry in Property Income Impact is analogous to the Labor Income Impact described in 2/ above.
- 4/ The contribution to total Personal Income of transfer payments (unemployment compensation, AFDC, etc.) The percent change entry is analogous to the Labor Income Impact in 2/ above.
- 5/ In dollars at an annual rate.
- 6/ In dollars per week.
- 7/ Real average weekly earnings are the average weekly earnings of production workers in manufacturing divided by the CPI.
- 8/ Annual data.
- 9/ Value is CPI-W (Urban Wage earners and clerical workers).

## Page S-9

- 1/ U.S. data annualized in thousands. Source: Bureau of the Census.
- 2/ Base Year is 1967. Source: Federal Reserve Board.
- 3/ Totals may not add due to rounding.
- 4/ Values shown in percent change columns are deficit as percent of GNP for period cited.
- 5/ Source: Federal Reserve Board.

## Available Publications

Review of Labor and Economic Conditions and its Monthly Supplement (Recent Issues)

Labor Market Information Summary for 1985 for Minneapolis-St. Paul SMSA (May 1984), St. Cloud SMSA (June 1984), Duluth SMSA (Sept. 1984), and Minnesota April 1984)

Minnesota Nonagricultural Wage & Salary Employment, Hours, and Earnings, January 1950 - December 1983 (April 1984)

Employment, Hours, and Earnings, January 1970 - February 1984, Minneapolis - St. Paul Area (April 1984)

1982 Occupational Employment Statistics in Minnesota (April 1984)

1984 Minnesota Salary Survey by Area (September 1984)

1984 Minnesota Hospitals and Nursing Homes Salary Survey (September 1984)

1984 Minnesota Wage Data by Industry and Size of Firm (September 1984)

Minnesota Labor Market Information Directory (June 1984)

Minnesota Employment and Wage Data by County (Fourth Quarter 1983) Limited number available for 1975-1982

Average Covered Employment & Wages by Economic Region for the Calendar Year 1982 by Two Digits of Industry (also available for 1976-81)

Unemployment Compensation Program Statistics: Total Wages, Taxable Wages, Contributions Due, and Benefits Paid, 1950 - 1978

Cyclical Sensitivity in Minnesota (August 1981)

Write to: Director, Research and Statistical Services Office  
Minnesota Department of Economic Security  
390 North Robert Street  
St. Paul, Minnesota 55101



# CURRENT MINNESOTA LABOR MARKET CONDITIONS

July 1984 Supplement to The Review of Labor and Economic Conditions

Prepared by the Research and Statistical Services Office, MN Dept. of Economic Security, 390 N. Robert St., St. Paul MN 55101, in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics, and Employment and Training Admin.

## Nation

After slow growth in May, the Nation's economy accelerated somewhat in June, according to a majority of the economic reports for June. However, most of the indicators did not rise as strongly in the second quarter as in the first quarter, indicating that there may be some moderation in the rapid growth of the economy.

Labor market conditions improved in June as the unemployment rate fell substantially and nonfarm payroll employment rose considerably more than in May. The seasonally adjusted unemployment rate dropped from 7.5 percent in May to 7.1 percent in June, the lowest since the 6.9 percent rate in April 1980 and 3.1 percentage points below the recession high. Also, total employment (seasonally adjusted) rose sharply again in June, rising by 460,000 after a surge of 886,000 in May. Moreover, seasonally adjusted nonfarm payroll employment climbed by 301,000 in June after a gain of 269,000 in May. The June increases in employment in construction, durable goods manufacturing and services were significantly larger than in May. However, except for construction and services, the growth in payroll employment slowed between the first and second quarters of this year. Most of the second quarter decline in employment growth was in manufacturing employment which rose only half as much as it did in the first quarter.

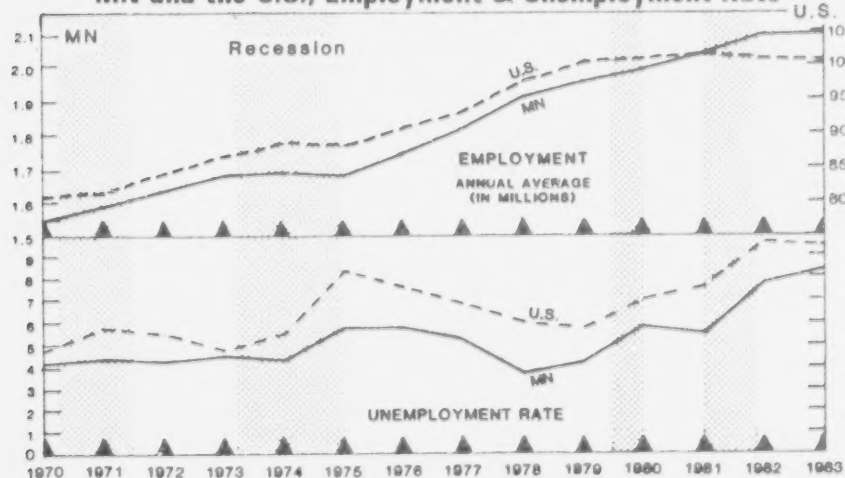
## State

Even though the employment and unemployment figures were somewhat distorted by the nurses' strike, it appears that the Minnesota economy is still growing at a satisfactory rate. Persons on strike are not counted as unemployed or employed. However, the 2,200 hospital workers who were laid off as a result of the strike are counted as unemployed.

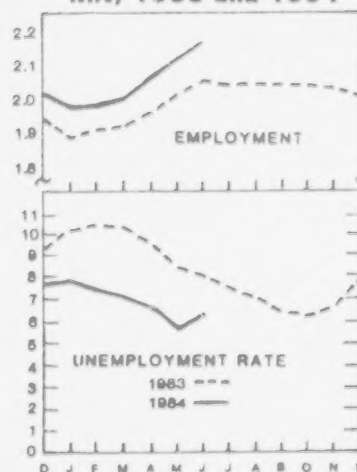
The gain of 0.2 of a percentage point in the seasonally adjusted unemployment rate to 6.2 percent in June was largely due to an adjustment specified by federal regulations and, to a lesser degree, to the layoffs among other hospital workers. Even with the rise in June, the rate was still well below the 8.0 percent in June, 1983. Despite the effects of the strike, seasonally adjusted total employment climbed a strong 11,100 in June after an increase of 5,300 in May and was 111,700 above the year earlier level. However, seasonally adjusted nonfarm payroll employment rose only 4,700 in June largely as a result of the strike which caused employment in the services sector which includes hospitals to fall by 5,600. The small June rise in payroll employment followed increases averaging 12,000 in the three preceding months. On the other hand, manufacturing and trade still continued to post solid seasonally adjusted gains in June. Adjusted employment in construction did not rise as strongly in June as it did in April and May while adjusted employment in mining fell slightly in June.

| Labor Force Estimates | MINNESOTA<br>(Numbers in '000's) |          |                  | UNITED STATES<br>(Numbers in '000,000's) |          |                  |
|-----------------------|----------------------------------|----------|------------------|------------------------------------------|----------|------------------|
|                       | JUNE<br>1984                     | Change   |                  | JUNE<br>1984                             | Change   |                  |
|                       |                                  | Last Mo. | From<br>Year Ago |                                          | Last Mo. | From<br>Year Ago |
| Civilian Labor Force  | 2315.3                           | 58.5     | 81.0             | 115.4                                    | 2.1      | 2.0              |
| Employed              | 2172.2                           | 47.0     | 115.8            | 106.8                                    | 1.7      | 5.0              |
| Unemployed            | 143.1                            | 11.5     | -34.8            | 8.6                                      | 0.4      | -3.0             |
| Unemployment Rate     |                                  |          |                  |                                          |          |                  |
| Actual                | 6.2                              | 0.4      | -1.8             | 7.4                                      | 0.2      | -2.8             |
| Seasonally Adjusted   | 6.2                              | 0.2      | -1.8             | 7.1                                      | -0.4     | -2.9             |

MN and the U.S., Employment & Unemployment Rate



MN, 1983 and 1984



# Minnesota Nonagricultural Wage & Salary Employment, Hours, and Earnings

| INDUSTRY                          | EMPLOYMENT <sup>1/</sup><br>(thousands) |             |              | PER CENT<br>CHANGE<br>FROM |              | PRODUCTION WORKERS' HOURS & EARNINGS |             |                               |             |                            |             |
|-----------------------------------|-----------------------------------------|-------------|--------------|----------------------------|--------------|--------------------------------------|-------------|-------------------------------|-------------|----------------------------|-------------|
|                                   |                                         |             |              |                            |              | Average<br>Weekly<br>Earnings        |             | Average<br>Hourly<br>Earnings |             | Average<br>Weekly<br>Hours |             |
|                                   | June<br>1984                            | May<br>1984 | June<br>1983 | May<br>1984                | June<br>1983 | June<br>1984                         | May<br>1984 | June<br>1984                  | May<br>1984 | June<br>1984               | May<br>1984 |
| TOTAL NONAGRICULTURAL             | 1832.1                                  | 1814.6      | 1735.6       | 1.0                        | 5.6          |                                      |             |                               |             |                            |             |
| MANUFACTURING                     | 371.8                                   | 363.5       | 345.5        | 2.3                        | 7.6          | 390.26                               | 388.33      | 9.66                          | 9.66        | 40.4                       | 40.2        |
| Durable Goods                     | 224.8                                   | 220.6       | 205.9        | 1.9                        | 9.2          | 405.18                               | 401.44      | 9.74                          | 9.72        | 41.6                       | 41.3        |
| Furniture, Lumber and Wood        | 16.9                                    | 16.2        | 15.3         | 4.4                        | 10.7         | 423.61                               | 399.38      | 10.11                         | 10.06       | 41.9                       | 39.7        |
| Stone, Clay and Glass             | 9.8                                     | 9.3         | 9.5          | 5.9                        | 3.8          | 380.65                               | 385.30      | 10.07                         | 10.06       | 37.8                       | 38.3        |
| Primary Metals                    | 6.2                                     | 6.0         | 5.4          | 2.7                        | 13.9         | 378.22                               | 377.58      | 9.07                          | 8.99        | 41.7                       | 42.0        |
| Fabricated Metals                 | 34.0                                    | 33.6        | 32.6         | 1.2                        | 4.2          | 449.94                               | 445.71      | 10.79                         | 10.74       | 41.7                       | 41.5        |
| Nonelectrical Machinery           | 87.6                                    | 86.6        | 78.7         | 1.1                        | 11.3         | 427.70                               | 423.69      | 10.04                         | 10.04       | 42.6                       | 42.2        |
| Electrical Machinery              | 29.1                                    | 28.4        | 26.1         | 2.4                        | 11.3         | 330.48                               | 327.65      | 8.10                          | 8.09        | 40.8                       | 40.5        |
| Transportation Equipment          | 7.4                                     | 7.4         | 6.4          | 0.5                        | 17.0         | 467.20                               | 460.53      | 10.84                         | 10.76       | 43.1                       | 42.8        |
| Other Durable Goods <sup>2/</sup> | 33.7                                    | 33.0        | 31.8         | 2.1                        | 5.8          | 372.53                               | 371.29      | 9.02                          | 8.99        | 41.3                       | 41.3        |
| Nondurable Goods                  | 147.0                                   | 142.9       | 139.6        | 2.8                        | 5.3          | 370.15                               | 371.32      | 9.54                          | 9.57        | 38.8                       | 38.8        |
| Food and Kindred                  | 45.7                                    | 43.5        | 44.2         | 5.0                        | 3.3          | 320.42                               | 325.56      | 8.41                          | 8.59        | 38.1                       | 37.9        |
| Textile and Apparel               | 5.3                                     | 5.2         | 5.0          | 2.3                        | 7.0          | 219.24                               | 219.13      | 6.09                          | 6.07        | 36.0                       | 36.1        |
| Paper and Allied                  | 34.0                                    | 33.1        | 32.7         | 2.9                        | 3.9          | 478.16                               | 477.30      | 11.12                         | 11.10       | 43.0                       | 43.0        |
| Printing and Publishing           | 39.6                                    | 39.3        | 36.3         | 0.8                        | 9.1          | 369.36                               | 368.08      | 10.26                         | 10.14       | 36.0                       | 36.3        |
| Chemical and Petroleum            | 9.6                                     | 9.3         | 9.5          | 2.7                        | 1.1          | 438.87                               | 444.04      | 10.89                         | 10.91       | 40.3                       | 40.7        |
| Rubber and Leather                | 12.8                                    | 12.6        | 11.9         | 1.8                        | 7.2          | 319.02                               | 316.34      | 8.18                          | 8.07        | 39.0                       | 39.2        |
| NONMANUFACTURING                  | 1460.3                                  | 1451.1      | 1390.1       | 0.6                        | 5.1          |                                      |             |                               |             |                            |             |
| Mining and Quarrying              | 11.1                                    | 10.7        | 10.0         | 4.2                        | 11.7         | 513.11                               | 508.28      | 12.99                         | 13.10       | 39.5                       | 38.8        |
| Metal Mining                      | 8.7                                     | 8.6         | 7.7          | 1.6                        | 13.4         | 538.32                               | 532.51      | 13.91                         | 13.94       | 38.7                       | 38.2        |
| Construction                      | 77.1                                    | 69.0        | 66.2         | 11.7                       | 16.5         | 530.32                               | 558.38      | 14.45                         | 14.93       | 36.7                       | 37.4        |
| Building                          | 21.2                                    | 19.7        | 18.1         | 13.2                       | 17.0         | 471.04                               | 516.38      | 12.87                         | 13.77       | 36.6                       | 37.5        |
| Highway and Heavy                 | 15.1                                    | 12.2        | 13.1         | 23.5                       | 15.0         | 488.67                               | 504.81      | 12.53                         | 12.78       | 39.0                       | 39.5        |
| Special Trades                    | 40.8                                    | 38.0        | 34.9         | 7.2                        | 16.8         | 576.74                               | 597.84      | 16.11                         | 16.29       | 35.8                       | 36.7        |
| Transportation                    | 62.0                                    | 62.4        | 59.2         | -0.6                       | 4.8          |                                      |             |                               |             |                            |             |
| Railroads                         | 10.3                                    | 10.3        | 11.1         | 0.1                        | -7.0         | 540.72                               | 540.75      | 11.73                         | 11.73       | 46.1                       | 46.1        |
| Trucking and Warehousing          | 25.1                                    | 24.5        | 24.0         | 2.6                        | 4.8          | 436.41                               | 433.70      | 11.70                         | 11.69       | 37.3                       | 37.1        |
| Public Utilities                  | 34.6                                    | 34.2        | 34.3         | 1.2                        | 1.1          | 511.83                               | 511.03      | 12.86                         | 12.84       | 39.8                       | 39.8        |
| Communications                    | 20.2                                    | 19.9        | 20.1         | 1.2                        | .0           | 468.07                               | 468.47      | 11.88                         | 11.89       | 39.4                       | 39.4        |
| Elec., Gas and Sanitary           | 14.5                                    | 14.3        | 14.1         | 1.1                        | 2.7          | 564.60                               | 561.78      | 14.01                         | 13.94       | 40.3                       | 40.3        |
| Trade                             | 460.9                                   | 452.9       | 433.2        | 1.8                        | 6.4          | 228.91                               | 225.15      | 7.53                          | 7.48        | 30.4                       | 30.1        |
| Retail                            | 345.6                                   | 339.4       | 323.2        | 1.8                        | 6.9          | 183.02                               | 180.79      | 6.49                          | 6.48        | 28.2                       | 27.9        |
| General Merchandise               | 47.5                                    | 47.3        | 43.9         | 0.5                        | 8.3          | 166.12                               | 160.75      | 5.87                          | 5.91        | 28.3                       | 27.2        |
| Food Stores                       | 46.5                                    | 45.6        | 45.4         | 2.1                        | 2.4          | 221.38                               | 217.26      | 7.53                          | 7.65        | 29.4                       | 28.4        |
| Automotive                        | 36.5                                    | 35.7        | 34.3         | 2.2                        | 6.4          | 317.32                               | 314.04      | 8.53                          | 8.33        | 37.2                       | 37.7        |
| Eating and Drinking               | 119.2                                   | 116.5       | 109.6        | 2.4                        | 8.8          | 106.94                               | 106.24      | 4.67                          | 4.68        | 22.9                       | 22.7        |
| Wholesale                         | 115.4                                   | 113.5       | 110.0        | 1.6                        | 4.9          | 396.55                               | 387.86      | 10.30                         | 10.18       | 38.5                       | 38.1        |
| F.I.R.E.                          | 106.1                                   | 105.5       | 101.8        | 0.6                        | 4.2          |                                      |             |                               |             |                            |             |
| Finance                           | 49.0                                    | 49.1        | 48.3         | -0.1                       | 1.3          |                                      |             |                               |             |                            |             |
| Insurance                         | 38.0                                    | 37.7        | 35.9         | 0.8                        | 5.7          |                                      |             |                               |             |                            |             |
| Real Estate                       | 19.2                                    | 18.8        | 17.6         | 2.0                        | 8.9          |                                      |             |                               |             |                            |             |
| Service Industries                | 410.9                                   | 415.0       | 395.1        | -1.0                       | 4.0          |                                      |             |                               |             |                            |             |
| Hotel and Lodging                 | 25.1                                    | 23.4        | 22.6         | 7.3                        | 11.1         |                                      |             |                               |             |                            |             |
| Business Services                 | 69.0                                    | 67.4        | 61.9         | 2.3                        | 11.4         |                                      |             |                               |             |                            |             |
| Health Services                   | 128.5                                   | 135.6       | 134.0        | -5.2                       | -4.1         |                                      |             |                               |             |                            |             |
| Private Education                 | 20.2                                    | 24.7        | 19.5         | -18.2                      | 3.5          |                                      |             |                               |             |                            |             |
| Soc. Serv., Museums etc.          | 89.7                                    | 88.4        | 84.6         | 1.5                        | 6.1          |                                      |             |                               |             |                            |             |
| Government                        | 297.6                                   | 301.5       | 290.4        | -1.3                       | 2.5          |                                      |             |                               |             |                            |             |
| Federal                           | 31.3                                    | 31.2        | 30.7         | 0.3                        | 2.0          |                                      |             |                               |             |                            |             |
| State                             | 70.7                                    | 76.0        | 68.6         | -7.1                       | 3.0          |                                      |             |                               |             |                            |             |
| Local                             | 195.6                                   | 194.3       | 191.0        | 0.7                        | 2.4          |                                      |             |                               |             |                            |             |

<sup>1/</sup> Totals may not add because of rounding.

<sup>2/</sup> Includes Scientific Instruments and Miscellaneous Industries.

# Labor Force Data: State, SMSAs, and Counties

| Area or County                             | June, 1984 Prelim.           |        |             | Area or County          | June, 1984 Prelim.           |        |             |
|--------------------------------------------|------------------------------|--------|-------------|-------------------------|------------------------------|--------|-------------|
|                                            | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |                         | Labor <sup>1/</sup><br>Force | Unemp. | Un.<br>Rate |
| State of Minnesota                         | 2315349                      | 143129 | 6.2         | Lake                    | 4563                         | 701    | 15.4        |
| Metropolitan Areas                         |                              |        |             | Lake of the Woods       | 2144                         | 184    | 8.6         |
| Duluth/Superior<br>(Duluth City Only)      | 37083                        | 3484   | 9.4         | Le Sueur                | 13096                        | 1088   | 8.3         |
| Fargo/Moorhead<br>(Clay County, MN Only)   | 28335                        | 1591   | 5.6         | Lincoln                 | 4578                         | 275    | 6.0         |
| Minneapolis/St. Paul SMSA <sup>2/</sup>    | 1252425                      | 63226  | 5.0         | Lyon                    | 16950                        | 907    | 5.4         |
| Rochester SMSA <sup>3/</sup> (Olmsted Co.) | 60655                        | 2692   | 4.4         | McLeod                  | 17999                        | 1026   | 5.7         |
| St. Cloud SMSA <sup>3/</sup>               | 83674                        | 5973   | 7.1         | Mahnomen                | 3331                         | 353    | 10.6        |
| Counties                                   |                              |        |             | Marshall                | 7227                         | 914    | 12.6        |
| Aitkin                                     | 5810                         | 871    | 15.0        | Martin                  | 14994                        | 909    | 6.1         |
| Anoka                                      | 118658                       | 6080   | 5.1         | Meeker                  | 11559                        | 1110   | 9.6         |
| Becker                                     | 13608                        | 1650   | 12.1        | Mille Lacs              | 9397                         | 775    | 8.2         |
| Beltrami                                   | 17444                        | 1437   | 8.2         | Morrison                | 14235                        | 1304   | 9.2         |
| Benton                                     | 12881                        | 893    | 6.9         | Mower                   | 19066                        | 1131   | 5.9         |
| Big Stone                                  | 4473                         | 291    | 6.5         | Murray                  | 7002                         | 476    | 6.8         |
| Blue Earth                                 | 30127                        | 1456   | 4.8         | Nicollet                | 15527                        | 769    | 5.0         |
| Brown                                      | 16197                        | 970    | 6.0         | Nobles                  | 13327                        | 798    | 6.0         |
| Carlton                                    | 12546                        | 1338   | 10.7        | Norman                  | 5233                         | 350    | 6.7         |
| Carver                                     | 22219                        | 940    | 4.2         | Olmsted                 | 60655                        | 2692   | 4.4         |
| Cass                                       | 11995                        | 1081   | 9.0         | Otter Tail              | 28367                        | 2829   | 10.0        |
| Chippewa                                   | 8514                         | 502    | 5.9         | Pennington              | 6614                         | 574    | 8.7         |
| Chisago                                    | 15504                        | 733    | 4.7         | Pine                    | 10585                        | 974    | 9.2         |
| Clay                                       | 28335                        | 1591   | 5.6         | Pipestone               | 6237                         | 293    | 4.7         |
| Clearwater                                 | 4616                         | 819    | 17.7        | Folk                    | 19084                        | 1798   | 9.4         |
| Cook                                       | 2701                         | 250    | 9.3         | Pope                    | 6225                         | 377    | 6.1         |
| Cottonwood                                 | 8594                         | 784    | 9.1         | Ramsey                  | 278372                       | 14279  | 5.1         |
| Crow Wing                                  | 18897                        | 1587   | 8.4         | Red Lake                | 2520                         | 372    | 14.8        |
| Dakota                                     | 116900                       | 5405   | 4.6         | Redwood                 | 11736                        | 619    | 5.3         |
| Dodge                                      | 9070                         | 660    | 7.3         | Renville                | 12847                        | 974    | 7.6         |
| Douglas                                    | 14812                        | 849    | 5.7         | Rice                    | 25349                        | 1808   | 7.1         |
| Faribault                                  | 11710                        | 689    | 5.9         | Rock                    | 6578                         | 242    | 3.7         |
| Fillmore                                   | 14013                        | 892    | 6.4         | Roseau                  | 6811                         | 611    | 9.0         |
| Freeborn                                   | 19151                        | 1422   | 7.4         | St. Louis (Inc. Duluth) | 89605                        | 9155   | 10.2        |
| Goodhue                                    | 21837                        | 1461   | 6.7         | Scott                   | 26365                        | 1216   | 4.6         |
| Grant                                      | 3885                         | 211    | 5.4         | Sherburne               | 15439                        | 1204   | 7.8         |
| Hennepin                                   | 570918                       | 30185  | 5.3         | Sibley                  | 9217                         | 579    | 6.3         |
| Houston                                    | 11006                        | 546    | 4.9         | Stearns                 | 55354                        | 3876   | 7.0         |
| Hubbard                                    | 6142                         | 728    | 11.9        | Steele                  | 18039                        | 1037   | 5.7         |
| Isanti                                     | 11198                        | 805    | 7.2         | Stevens                 | 6485                         | 296    | 4.6         |
| Itasca                                     | 18014                        | 2130   | 11.8        | Swift                   | 7188                         | 772    | 10.7        |
| Jackson                                    | 3743                         | 447    | 5.1         | Todd                    | 12788                        | 948    | 7.4         |
| Kanabec                                    | 5999                         | 621    | 10.4        | Traverse                | 3220                         | 158    | 4.9         |
| Kandiyohi                                  | 19922                        | 1123   | 5.6         | Wabasha                 | 10763                        | 910    | 8.5         |
| Kittson                                    | 3761                         | 330    | 8.8         | Wadena                  | 5935                         | 478    | 8.1         |
| Koochiching                                | 8052                         | 774    | 9.6         | Waseca                  | 9662                         | 496    | 5.1         |
| Lac qui Parle                              | 6510                         | 379    | 5.8         | Washington              | 68062                        | 2828   | 4.2         |
|                                            |                              |        |             | Watsonwan               | 7380                         | 554    | 7.5         |
|                                            |                              |        |             | Wilkin                  | 4772                         | 323    | 6.8         |
|                                            |                              |        |             | Winona                  | 23871                        | 1829   | 7.7         |
|                                            |                              |        |             | Wright                  | 35427                        | 1560   | 4.4         |
|                                            |                              |        |             | Yellow Medicine         | 8727                         | 468    | 5.4         |

## Technical Notes:

1/ Labor force data is computed according to BLS methodology. The method includes an adjustment to assure that the sum of the substate areas equals the separately estimated State total. This adjustment is applied to all county and SMSA areas. County and area unemployment was multiplied by an adjustment factor of 1.63; employment was multiplied by 1.03. For a more detailed explanation see the Review of Labor and Economic Conditions, Vol. 4, No. 4, (February 1978 issue), p. 29.

2/ Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright Counties.

3/ Benton, Sherburne, and Stearns Counties.

## Selected Minnesota Program Statistics

### Characteristics of the Insured Unemployed

Tables 1 and 2 provide data on persons who filed a claim for unemployment compensation in Minnesota during the month. Only those claiming benefits from the regular State program are represented since data on the characteristics of Federal employees and veterans are not available.

The total number of claimants for unemployment benefits fell by a relatively modest 1,472 or 4.9 percent in June. The June decline would have been larger if it were not for the nurses' strike which caused layoffs among other hospital workers. Over-the-month decreases in claimants occurred in all industries except finance-insurance-real estate, services and public administration. The June reductions among claimants in mining and construction were quite steep on a percentage basis. Over-the-year, the number of claimants dropped by 10,298 or 26.7 percent. Nearly 40 percent of the decline in claimants from a year ago was among claimants in manufacturing. There were also sizeable over-the-year decreases in claimants in the construction and trade industries.

**Table 1. Distribution of Insured Unemployed, By Age and Sex, June 1984**

| Age Groups  | Number | Percent Distributions |            |                |
|-------------|--------|-----------------------|------------|----------------|
|             |        | Men of Totals         | Men of Men | Women of Women |
| TOTALS      | 28300  | 54.8                  | 100.0      | 100.0          |
| Under 45    | 21174  | 56.0                  | 76.6       | 72.7           |
| Under 25    | 4502   | 57.7                  | 16.8       | 14.9           |
| 25-34       | 10538  | 56.8                  | 38.6       | 35.5           |
| 35-44       | 6134   | 53.5                  | 21.2       | 22.3           |
| 45 and Over | 7126   | 51.0                  | 23.4       | 27.3           |
| 45-54       | 3942   | 50.1                  | 12.7       | 15.4           |
| 55 and Over | 3184   | 52.2                  | 10.7       | 11.9           |

**Table 2. Distribution of Insured Unemployed By Industry and Occupation, June 1984**

| Industry and Occupational Attachment | Number | Percent of Total | Percent Long-Term <sup>1/</sup> Unemployed | Women as Percent of Total |
|--------------------------------------|--------|------------------|--------------------------------------------|---------------------------|
| Total, All Industries                | 28300  | 100.0            | 20.3                                       | 46.0                      |
| Ag., For., Fish.                     | 289    | 1.0              | 21.2                                       | 31.8                      |
| Mining                               | 157    | 0.6              | 42.6                                       | 9.6                       |
| Construction                         | 3289   | 11.6             | 22.7                                       | 5.0                       |
| Manufacturing                        | 7425   | 26.2             | 21.7                                       | 39.4                      |
| Pub. Utilities                       | 1288   | 4.6              | 19.4                                       | 25.0                      |
| Wholesale Trade                      | 1764   | 6.2              | 24.4                                       | 32.0                      |
| Retail Trade                         | 3472   | 12.3             | 27.7                                       | 50.5                      |
| Fin., Ins., Real Est.                | 918    | 3.2              | 28.1                                       | 59.2                      |
| Services                             | 8704   | 30.8             | 14.1                                       | 69.3                      |
| Public Admin.                        | 527    | 1.9              | 19.4                                       | 55.3                      |
| Inf. Not Available                   | 467    | 1.6              | 3.1                                        | 40.6                      |
| Total, All Occupations               | 28300  | 100.0            | 20.3                                       | 46.0                      |
| Prof., Tech., Mgr.                   | 6226   | 22.0             | 16.9                                       | 59.7                      |
| Clerical                             | 3920   | 13.9             | 21.6                                       | 84.5                      |
| Sales                                | 1230   | 4.4              | 28.8                                       | 36.6                      |
| Services                             | 2919   | 10.3             | 18.7                                       | 63.7                      |
| Farm., For., Fish. Processing        | 238    | 0.8              | 16.0                                       | 16.9                      |
| Machine Trades                       | 1335   | 4.7              | 13.1                                       | 46.1                      |
| Benchwork                            | 1604   | 5.7              | 23.4                                       | 18.3                      |
| Structural Work                      | 2413   | 8.5              | 25.5                                       | 60.1                      |
| Misc.                                | 4262   | 15.1             | 21.8                                       | 3.3                       |
| Inf. Not Available                   | 3792   | 13.4             | 19.5                                       | 23.4                      |
|                                      | 341    | 1.2              | 12.0                                       | 66.0                      |

<sup>1/</sup> Long-Term unemployed refers to unemployment insurance claimants whose current spell of unemployment has lasted 15 weeks or longer.

### Job Service Applicant Supply and Demand

Table 3 compares Job Service (J.S.) job applicants with the J.S. job openings that existed at the end of the month. These comparisons are expressed as supply/demand ratios. Other things being equal, the greater the ratio of applicants to openings, the greater the competition has been for work within that occupational category. To put these ratios into context, the reader must remember that not only do job seekers and employers in general find jobs or recruit workers through other means, but those interested in certain kinds of jobs are particularly unlikely to use the J.S. For example, workers seeking professional and Managerial jobs are least likely to use the J.S., whereas employers usually recruit construction workers through union halls and hire teachers directly. Thus, the main value of Table 3 is that it reflects, for broad occupational groups, the relative labor market conditions that those using the J.S. encountered when seeking work.

**Table 3. Experienced Supply/Job Openings Demand<sup>1/</sup>**

| Occupation          | Applicants (Supply)<br>June 1984 | Job Openings (Demand)<br>June 1984 | Supply/Demand Ratio |           |
|---------------------|----------------------------------|------------------------------------|---------------------|-----------|
|                     |                                  |                                    | June 1984           | June 1983 |
| Total               | 113792                           | 13856                              | 8.2                 | 16.7      |
| Prof., Tech., Mgr.  | 13334                            | 1470                               | 9.1                 | 26.2      |
| Clerical            | 18701                            | 2267                               | 8.2                 | 9.9       |
| Sales               | 5002                             | 1808                               | 2.8                 | 5.3       |
| Dom. Services       | 2366                             | 220                                | 10.8                | 14.4      |
| Other Services      | 16540                            | 3057                               | 5.4                 | 13.3      |
| Farm., Fish., For.  | 8225                             | 346                                | 23.8                | 39.3      |
| Processing          | 2236                             | 934                                | 2.4                 | 4.9       |
| Machine Trades      | 6716                             | 864                                | 7.8                 | 34.5      |
| Benchwork           | 6820                             | 768                                | 8.9                 | 41.3      |
| Structural Work     | 14981                            | 995                                | 15.1                | 57.3      |
| Mtr. Frght., Trans. | 4579                             | 455                                | 10.1                | 47.8      |
| Pkg. & Mat. Hndlg.  | 12847                            | 610                                | 21.1                | 17.1      |
| Other               | 1445                             | 62                                 | 23.3                | 50.2      |

<sup>1/</sup> Inexperienced and improperly coded job applicants are not included in this table.